

**Saskia Mordijck**

College of William & Mary  
Small Hall 254  
Williamsburg, VA, 23187  
USA

+1-310-467-2026 (cell)  
smordijck@wm.edu

---

**Professional Experience**

---

<b>Associate Professor</b> Department of Physics The College of William & Mary	2022-present
<b>Assistant Professor</b> Department of Physics The College of William & Mary	2019-present
<b>Assistant Professor</b> Department of Applied Science The College of William & Mary	2016-2019
<b>Research Assistant Professor</b> Department of Computer Science, Department of Physics and the Department of Applied Science The College of William & Mary	2011-2016
<b>Graduate Research Assistant</b> Center for Energy Research, UCSD Supervisor: Dr. R.A. Moyer	2007 - 2010

**Education**

---

<b>University of California San Diego (UCSD)</b> , La Jolla, USA PhD in Engineering Physics ( Engineering Science) (Plasma physics)	January 2011
<b>University of California San Diego (UCSD)</b> , La Jolla, USA MS in Mechanical Engineering: Applied Physics	Spring 2010
<b>Katholieke Universiteit Leuven (K.U.Leuven)</b> , Leuven, Belgium Burgerlijk Ingenieur Werktuigkunde, (Master in Mechanical Engineering).	July 2006

**Honors, Awards and Leadership**

---

**Best paper**

Awarded the “ Physics of Plasmas Editors Choice of 2012 best article”	2013
Two papers recognized as “Highlights of 2014” by Nuclear Fusion	2015

## Awards

WISE travel award in 2013 awarded to perform experiments on DIII-D 2013

## Honors

Distinguished prolific reviewer for Plasma Physics and Controlled Fusion 2019

Distinguished prolific reviewer for Nuclear Fusion 2018

## Leadership

President of University Fusion Association (UFA) 2023-2025

Vice president of University Fusion Association (UFA) 2021-2023

Chair of Women in Plasma Physics 2020-2022

Chair of Expertpanel W&T7 at FWO (Flemish Fund for Scientific Research):  
Energie, Electrotechniek, Elektronica en Werktuigkunde 2019-2021

(Energy, Electrical and Mechanical Engineering)

Vice chair of Women in Plasma Physics 2017-2020

Leader of the Joint Research Target (JRT) for 2019 for DOE-FES 2017 - 2019

Program chair for MFE theory for the APS-DPP 2016 meeting 2016

Leader of the Topical group on Confinement and Transport 2016 - 2018

Leader of international joint experiment through the ITPA (TC-27) 2014 - present

Deputy leader of the Topical group on Confinement and Transport 2014 - 2016

## Current projects

---

- Validation of plasma edge models with respect to neutral fueling and particle transport in tokamaks (with graduate student Richard Reksoatmodjo, Jack Gabriels and Jerry Hughes (MIT)) [DOE theory award].
- Investigating the impact of neutrals on the suppression of ELMs, by coupling multiple physics code packages together and comparing to experimental observations on NSTX, NSTX-U, MAST and MAST-U (with graduate student Yi-Cheng Chuang and Richard Fitzpatrick (UT Austin)) [DOE ST program]
- Studying neutral fueling versus the inward pinch at the plasma edge on DIII-D, along with changes in turbulence and the impact of plasma species leveraging gas puff modulation and advanced analysis techniques (with graduate students Ryan Chaban and Jarred Loughran and post-docs Modhu Laishram and Julio Balbin-Arias) [DOE experimental].
- Study fundamental experimental particle transport and turbulence in the linear plasma device at UCLA along with validation of the Hermes code for different plasma species, neutral densities and mixed plasmas [NSF Career].
- Study the impact of Spherical Tokamak configuration on fueling and opacity on MAST-U, validate plasma edge models and expand this to future reactor conditions (with Jerry Hughes and Mike Wigram (MIT)) [DOE ST program].

## Teaching Experience

---

- Fluid Mechanics (PHYS302)** Spring '21  
Introductory undergraduate course in fluid mechanics. Topics include, kinematics, conservation laws, vorticity, dimensionless analysis and selected topics depending on general interest.
- PHYS107 Physics for Life Sciences** Fall 2020  
Large introduction physics course for students interested in life science. Covers topics of kinematics, dynamics, in 2 dimensions including rotation as well as stability, equilibrium and an introduction to fluids
- Energy for the 21st century (COLL300)** Spring '20  
New course developed introducing students to various aspects related to energy for the 21st century. From the current technology, infrastructure, benefits and negatives. The class was very hands on with students researching and presenting different energy systems to them developing strategic plans for various US states, which requires knowledge on resources, economy and policy. Fall '21
- Mathematical and Computational Methods I (APSC607)** Fall 2017  
Introductory compulsory graduate course in mathematical and computational methods. Topics include applied and numerical mathematical techniques necessary for a variety of topics relevant to the research interests of incoming graduate students.
- Plasma Physics and Fusion Science (APSC490/690)** 2017-2018  
Introduction to plasma physics and fusion science for undergraduate and graduate students who are interested in related research projects. Paper reading and textbook lecturing to give the necessary background.
- Plasma Physics and Fusion Science (PHYS452)** Fall, Spring 2017  
Advice a senior student on their thesis project.
- Fluid Mechanics (APSC302 & PHYS302)** Spring '17 & Spring & Fall '19  
Introductory undergraduate course in fluid mechanics. Topics include, kinematics, conservation laws, vorticity, dimensionless analysis and selected topics depending on general interest.
- Advanced Topics in Plasma Turbulence & Transport** Fall 2016  
Series of lectures given at PKU (Beijing, China) on turbulence, transport and confinement in plasmas.
- Plasma Physics (783)** Fall 2013  
Introductory graduate course on Plasma Physics. Topics include, single particle motion, MHD, waves, instabilities, kinetic theory and quasi-linear theory (limit 10 students).
- General Physics (102)** Spring 2013  
Develop an understanding of fundamental concepts of physics. Emphasis is placed on Newtonian mechanics, thermodynamics, electricity and magnetism and modern physics (limit 35 students).

**Plasma Physics**

Fall 2011

Reading Course for graduate students

Weekly meeting to discuss different topic in plasma physics based on basic textbooks and seminal/review papers

**Emerging 21st Century Energy Systems**

Winter 2007

Teaching of renewable energy systems and world energy needs

Tasks: Exercises , homework, midterm questions, grading of midterm, final and project (approx 40 students).

**Emerging 21st Century Energy Systems**

February 2007

Replaced Prof. Dr. George Tynan for a single lesson.

**Student Advising**

---

**Ph.D. Students**

Jack Gabriels Ph.D. student 2022-ongoing

Yi-Cheng Chuang Ph.D. student 2021-ongoing

Jarred Loughran Ph.D. student 2021-ongoing

Ryan Chaban Ph.D student 2017-ongoing

Richard Reksoatmodjo Ph.D student 2017-ongoing

Ph.D. Xin Wang graduated 2016.

**Undergraduate Students**

Advising Lela Creamer on a research project in plasma physics (2022 - )

Advising Julius Kiewel on a research project in plasma physics (2022 - )

Advising Nick Holland on a research project in plasma physics (2022 - )

Advising Griffin Heyde on a research project in plasma physics (2022 - )

Advising Preetha Gopinath on a research project in plasma physics (2022 - )

Advising Gwen Galleher on a research project in plasma physics (2022 - )

Advising Seth Gnesin on a research project in plasma physics (2021 - 2022)

Advising Javier Chiriboga on a research project in plasma physics (2021 - )

Advising Leo Murphy on a research project in plasma physics (2021 - )

Advising Jameson Crousse on a research project in plasma physics (2021 - 2022)

Advising Jacob Brotman-Krass on a research project in plasma physics (Spring 2021)

Advising Sage Stanish on a research project in plasma physics (2020 - 2022)

Advising Reehan Siraj on a research project in plasma physics (2020 - 2022)

Advising Sam Phillips on a research project in plasma physics (2019 -2020)

Advising Kiera McKay on a research project in plasma physics (2019 -2020)

Advising Milan Wolff on a research project in plasma physics (2018 - 2020)

Advising Conor Perks (NC state) on a research project in plasma physics (2018 - 2020)  
 Advising Vincent Cordrey on a research project in plasma physics (2017 - 2018)  
 Advising Peter Kress on a research project in plasma physics (2017 - 2018)  
 Advising Isabelle Lee on a research project in plasma physics (2012-2014)

## Service

---

### Department and University

Diversity Advisory Committee in physics	2020-2022
Zable graduate student award committee	2019,2021
Hiring committee for physics faculty job in condensed matter	2019-2020
Graduate Studies committee Physics	2019-2020
Graduate Admissions committee Physics	2019-2022
Chair of award committee in APSC	2018-2019
Hiring committee for lecture position on fluid mechanics	2017
Hiring committee for NTE data science position	2017
Committee for Sanderson undergraduate mentoring award	2017, 2018
Judging panel for the Graduate Research Symposium	2017, 2018
Prize nomination committee Applied Science	2017-2019
Freshman advising	2017-2022
Space committee Applied Science	2016-2018
Admissions and Recruiting committee Applied Science	2016-2019
Web presence committee Computer Science department	2012-2016
Photographer for Computer Science	2012-2016

### Community-wide

#### **APS-Division of Plasma Physics**

Chair of the APS-DPP committee on women in plasma physics	2020 - 2022
Member of the APS-DPP subcommittee to steer community effort for fusion roadmap	2018 - 2020
Vice-chair of the APS-DPP committee on women in plasma physics	2017 - 2020
Member at large of the APS-DPP executive committee	2016-2019
Program chair for MFE theory for the APS-DPP 2016 meeting	2015-2016
Member of the APS-DPP committee on women in plasma physics	2015-2017
Member of the APS-DPP committee on education and outreach	2014-2016

#### **DOE Fusion Energy Science Joint Research Target (JRT)**

Leader of the JRT for fysical year 2019	2018 - 2019
---	-------------

<b>International Tokamak Physics Activity (ITPA)</b>	
ITPA confinement group member (1 of 7 US representatives)	2016 - 2019
Leader joint experiment TC-27	2014 - present
ITPA confinement group expert	2012 - 2015
ITPA pedestal group expert	2011 - present
<b>US Burning Plasma Organization (USBPO)</b>	
Deputy leader of the Topical group on Confinement and Transport	2014 - 2016
Leader of the Topical group on Confinement and Transport	2016 - 2018
Editor for the monthly USBPO newsletter	2015 - 2017
<b>University Fusion Association (UFA)</b>	
President of UFA	2023 - 2025
Vice-president of UFA	2021 - 2023
Member of executive committee of University Fusion Association	2018 - present
<b>Sherwood theory committee</b>	
Member of Sherwood theory committee	2018 - 2021
<b>Stellarator workshop</b>	
Member of program committee for the 2019 Stellarator workshop	2018 - 2019
<b>Edge Coordinating Committee</b>	
Member of the Edge Coordinating Committee	2016 - 2019
<b>U.S. Magnetic Fusion Research Strategic Directions</b>	
Member of the Committee	2017- 2018
<b>Science undergraduate laboratory internship (SULI)</b>	
Lecture at the plasma summer school for the SULI program at PPPL	2016-present
<b>Expanding your Horizons</b>	
Organize and participate in a workshop introducing middle school girls to what a plasma is through hands-on experiences.	2007
<b>Outreach</b>	
Video and article for W&M 100 years of women celebration	Fall 2018
Video and article for W&M	Fall 2013
Interview for W&M Alumni Magazine	Fall 2012
<b>Reviewing</b>	
Member for FWO (Fonds Wetenschappelijk Onderzoek, Belgium) - Expertpanel W&T7: Energie, Electrotechniek, Elektronica en Werktuigkunde	2016-2022
Nuclear Materials and Energy	2016 - present
Physical Review Letters	2016 - present
Journal of Plasma Physics	2014 - present
National and International grant agencies	2012 - present
Nuclear Fusion	2009 - present
Plasma Physics and Controlled Fusion	2009 - present
Journal of Nuclear Materials (PSI)	2008, 2010
<b>Editorial board</b>	
Member for the editorial board for Nuclear Fusion	2021-2024
Member of the editorial board for Communications Physics (Nature)	2022

## Awarded Grants

---

### Awarded:

Validation of particle transport modeling capabilities	DOE	PI	\$ 280K	05/01/2012-15
Development of long-pulse heating and current drive actuators and operational techniques compatible with a high-Z divertor and first wall	DOE	PI	\$ 390K	08/15/2013-16
Wise travel grant to lead an experiment on DIII-D investigating particle and momentum transport	W&M	PI	\$ 1000	Summer 2013
Validation of particle transport modeling capabilities	DOE	PI	\$ 85K	05/01/2015-16
Validation of particle transport modeling capabilities (supplement)	DOE	PI	\$ 62K	05/01/2015-16
Development of long-pulse heating and current drive actuators and operational techniques compatible with a high-Z divertor and first wall (supplement)	DOE	PI	\$ 55K	05/01/2015-16
The study of transport in burning plasma conditions	GA	PI	\$ 100K	12/1/2015-16
Validation of Edge transport in tokamaks	DOE	PI	\$ 270K	05/01/2016-20
The study of transport in burning plasma conditions	GA	PI	\$ 210K	12/1/2016-18
The study of transport in burning plasma conditions	GA	PI	\$ 260K	12/1/2017-19
Core-Edge integration of particle transport for burning plasma conditions on DIII-D	DOE	PI	\$ 960K	9/1/2018-21
Investigations of suppression of edge localized modes by resonant magnetic perturbations in NSTX/NSTX-u	DOE	PI	\$ 556K	9/11/2020-25
Role of neutrals versus transport in determining the pedestal density structure	DOE	PI	\$ 320K	9/11/2020-23
CAREER: Impact of Plasma Species, Mixing and Ionization Fraction on Drift-Wave Turbulence and Transport	NSF	PI	\$ 517K	12/1/2021-26
Opaqueness and aspect ratio impact on fueling and core-edge performance	DOE	PI	\$700K	9/1/2022-25

---

**Total**

~ \$ **4.8M** present

## Publications

---

- **Chapters in Books and Theses**

- [B1] C. Rea, **S. Mordijck**, M. Murillo, D. Humphreys, B. Spears, M. Barbarino “Chapter 9: Fusion” in INTERNATIONAL ATOMIC ENERGY AGENCY, Artificial Intelligence for Accelerating Nuclear Applications, Science and Technology, Non-serial Publications, IAEA, Vienna (2022).
- [B2] **Saskia Mordijck** “Particle transport as a result of Resonant Magnetic Perturbations” Ph.D. thesis, UCSD, January 7 2011, 114 pages.
- [B3] **Saskia Mordijck** “Effect of strong non-orthogonal wall structures on 2D fusion edge plasmas” Master thesis, K.U.Leuven, June 2 2006, 85 pages.

- **Peer reviewed Journal Papers**

- [J1] C. Perks, **S. Mordijck**, T. Carter, B. Van Compernelle, S. Vincena, G. Rossi and D. Schaffner “Impact of the electron density and temperature gradient on drift-wave turbulence in the Large Plasma Device” *Journal of Plasma Physics*, Volume 4, Article 88, August 2022.
- [J2] J. Mailloux, et al., **S. Mordijck** “Overview of JET results for optimising ITER operation” *Nuclear Fusion*, Volumen 62, Article 042026, April 2022.
- [J3] M.E. Fenstermacher et al., **S. Mordijck** “DIII-D research advancing the physics basis for optimizing the tokamak approach to fusion energy” *Nuclear Fusion*, Volume 62, Article 042024, April 2022.
- [J4] F. Sciortino, N.T. Howard, R. Reksoatmodjo, A.R. Foster, J.W. Hughes, E.S. Marmor, M.A. Miller, **S. Mordijck**, T. Odstrcil, T. Pütterich, M.L. Reinke, J.E. Rice, P. Rodriguez-Fernandez “Experimental inference of neutral and impurity transport in Alcator C-Mod using high-resolution x-ray and ultra-violet spectra” *Nuclear Fusion*, Volume 61, Article 126060, December 2021.
- [J5] F Sciortino, T Odstrčil, A Cavallaro, SP Smith, O Meneghini, Richard Reksoatmodjo, O Linder, JD Lore, NT Howard, ES Marmor, S Mordijck “Modeling of particle transport, neutrals and radiation in magnetically-confined plasmas with Aurora” *Plasma Physics and Controlled Fusion*, Volume 63, Article 112001, November 2021.
- [J6] JE Rice, F Sciortino, M Gu, N Cao, JW Hughes, JH Irby, ES Marmor, S Mordijck, ML Reinke, R Reksoatmodjo “The very high n Rydberg series of Ar16+ in Alcator C-mod tokamak plasmas” *Journal of Physics B*, Volume 54, Article 175701, October 2021.
- [J7] R. Reksoatmodjo, **S. Mordijck**, J.W. Hughes, J.D Lore, X. Bonnin “The role of edge fueling in determining the pedestal density in high neutral opacity Alcator C-Mod experiments” *Nuclear Materials and Energy*, Volume 27, article p.100971, March 2021.
- [J8] S. Banerjee, **S. Mordijck**, K.K. Barada, L. Zeng, R.J. Groebner, T.H. Osborne, T.L. Rhodes, P.B. Snyder, B.A. Grierson, A. Diallo “Evolution of ELMs, pedestal profiles and fluctuations in the inter-ELM period in NBI and ECH dominated discharges in DIII-D” *Nuclear Fusion*, Volume 61, Article 056008, May 2021.
- [J9] O. Meneghini, G. Snoep, B.C. Lyons, J. McClenaghan, C.S. Imai, B.A. Grierson, S.P. Smith, G.M. Staebler, P.B. Snyder, J. Candy, E.A. Belli, L.L. Lao, J.-M. Park, J.



- Citrin, T.L. di Cortemiglia, A.S. Tema Biwole, **Saskia Mordijck** “Neural-network accelerated coupled core-pedestal simulations with self-consistent transport of impurities and compatible with ITER IMAS” *Nuclear Fusion*, Volume 61, Article 026006, February 2021.
- [J10] E. Fransson, F. Eriksson, M. Oberparleiter, M. Held, **S. Mordijck**, H. Nordman, A.T. Salmi, P. Strand, T.J.J. Tala “Comparing particle transport in JET and DIII-D plasmas: gyrokinetic and gyrofluid modelling” *Nuclear Fusion*, Volume 61, Article 016015, January 2021.
- [J11] **S. Mordijck** “Overview of density pedestal structure: Role fueling versus transport” *Nuclear Fusion*, Volume 60, Article 082006, August 2020.
- [J12] **S. Mordijck**, T.L. Rhodes, L. Zeng, A.T. Salmi, T.J.J. Tala, C. Petty, G.R. McKee, R. Reksoatmodjo, F. Eriksson, E. Fransson and H. Nordman “Collisionality driven turbulent particle transport changes in DIII-D H-mode plasmas” *Nuclear Fusion*, Volume 60, Article 066019, June 2020.
- [J13] T.J.J. Tala, H. Norman, A.T. Salmi, C. Bourdelle, J. Citrin, A. Czarnecka, F. Eriksson, J. Hillesheim, C.F. Maggi, P. Mantica, A. Mariani, M. Maslov, **S. Mordijck**, V. Naulin, M. Oberparleiter, H. Weisen, G. Sips “Density peaking in JET - Determined by Fuelling or Transport” *Nuclear Fusion*, Volume 59, Article 126030, December 2019.
- [J14] E. Joffrin, et al. **S. Mordijck** and JET contributors “Overview of the JET preparation for deuterium–tritium operation with the ITER like-wall” *Nuclear Fusion*, Volume 59, Article 112021, October 2019.
- [J15] J. Harrison, et al. **S. Mordijck** “Overview of new MAST physics in anticipation of first results from MAST Upgrade” *Nuclear Fusion*, Volume 59, Article 112011, November 2019.
- [J16] P.B. Snyder, J.W. Hughes, T.H. Osborne, C. Paz-Soldan, W.M. Solomon, M. Knolker, D. Eldon, T. Evans, T. Golfopoulos, B.A. Grierson, R.J. Groebner, A.E. Hubbard, E. Kolemen, B. LaBombard, F.M. Laggner, O. Meneghini, **S. Mordijck**, T. Petrie, S. Scott, H.Q. Wang, H.R. Wilson, Y.B. Zhu “High fusion performance in Super H-mode experiments on Alcator C-Mod and DIII-D” *Nuclear Fusion*, Volume 59, Article 086017, August 2019.
- [J17] J. Hughes, P. Snyder, M. Reinke, B. LaBombard, **S. Mordijck**, S. Scott, E. Tolman, S. Baek, T. Golfopoulos, R. Granetz, M. Greenwald, A. Hubbard, E. Marmor, J. Rice, A. White, D. Whyte, T. Wilks, S. Wolfe “Access to pedestal pressure relevant to burning plasmas on the high magnetic field tokamak Alcator C-Mod” *Nuclear Fusion*, Volume 58, Article 112003, 2018.
- [J18] X. Wang, **S. Mordijck**, E.J. Doyle, L. Zeng, G.M. Staebler, O. Meneghini, S.P. Smith “Role of turbulence regime on determining the local density gradient” *Nuclear Fusion*, Volume 58, Article 016025, January 2018.
- [J19] Y.O. Kazakov, et al. **S. Mordijck** and JET contributors “Efficient generation of energetic ions in multi-ion plasmas by radio-frequency heating” *Nature of Physics*, Volume 13 (10), Article 973, 2017.
- [J20] R.A. Moyer, C. Paz-Soldan, R. Nazikian, D.M. Orlov, N.M. Ferraro, B.A. Grierson, M. Knölker, B.C. Lyons, G.R. McKee, T.H. Osborne, T.L. Rhodes, O. Meneghini, S. Smith, T.E. Evans, M.E. Fenstermacher, R.J. Groebner, J.M. Hanson, R.J. La Haye, T.C. Luce, **S. Mordijck**, W.M. Solomon, F. Turco, Z. Yan, L. Zeng and DIII-D Team

- “Validation of the model for ELM suppression with 3D magnetic fields using low torque ITER baseline scenario discharges in DIII-D” *Physics of Plasmas*, Volume 24, Article 102501, October 2017.
- [J21] X. Wang, **S. Mordijck**, E.J. Doyle, T.L. Rhodes, L. Zeng, G.R. McKee, M.E. Austin, O. Meneghini, G.M. Staebler and S.P. Smith “Understanding ECH pump-out in DIII-D H-mode plasmas” *Nuclear Fusion*, Volume 57, Article 116046, November 2017.
- [J22] W.M. Solomon for the DIII-D team “DIII-D research advancing the scientific basis for burning plasmas and fusion energy” *Nuclear Fusion*, Volume 57, Article 102018, October 2017.
- [J23] X. Litaudon, et al. **S. Mordijck** and JET contributors “Overview of JET results in support of ITER” *Nuclear Fusion*, Volume 57, Article 102001, October 2017.
- [J24] E. Meier, R.J. Goldston, E.G. Kaveeva, M.A. Makowski, **S. Mordijck**, V.A. Rozhansky, I. Yu Senichenkov and S.P. Voskoboynikov “Drifts, currents and power scrape-off width in SOLPS-ITER modeling of DIII-D” *Nuclear Materials and Energy*, ISSN 2352-1791, 2016.
- [J25] E. Meier, R.J. Goldston, E.G. Kaveeva, M.A. Makowski, **S. Mordijck**, V.A. Rozhansky, I. Yu Senichenkov and S.P. Voskoboynikov “Analysis of drift effects on the tokamak power scrape-off width using SOLPS-ITER” *Plasma Physics and Controlled Fusion*, Volume 58, Article 125012, December 2016.
- [J26] X. Wang, **S. Mordijck**, L. Zeng, L. Schmitz, T.L. Rhodes, E.J. Doyle, R. Groebner, O. Meneghini, G.M. Staebler and S.P. Smith “Turbulent particle transport as a function of toroidal rotation in DIII-D H-mode plasmas” *Plasma Physics and Controlled Fusion*, Volume 58, Article 045026, April 2016.
- [J27] **S. Mordijck**, T.L. Rhodes, L. Zeng, E.J. Doyle, L. Schmitz, C. Chrystal, E.J. Strait, R.A. Moyer “Effect of resonant magnetic perturbations on turbulence and transport in DIII-D L-mode plasmas” *Plasma Physics and Controlled Fusion*, Volume 58, Article 014003, January 2016.
- [J28] R.J. Buttery and the DIII-D team “DIII-D research to address key challenges for ITER and fusion energy” *Nuclear Fusion*, Volume 55, Article 104017, October 2015.
- [J29] F. Romanelli and on behalf of the JET Contributors “Overview of JET results” *Nuclear Fusion*, Volume 55, Article 104001, October 2015.
- [J30] **S. Mordijck**, Xin Wang, E.J. Doyle, T.L. Rhodes, L. Schmitz, L. Zeng, G. Staebler, C.C. Petty, R.J. Groebner, W-H. Ko, B.A. Grierson, W.M. Solomon, T. Tala, A. Salmi, C. Chrystal, P.H. Diamond and G.R. McKee “Particle transport in low-collisionality H-mode plasmas on DIII-D” *Nuclear Fusion*, Volume 55, Article 113025, October 2015.
- [J31] **S. Mordijck**, R.A. Moyer, N.M. Ferraro, M.R. Wade, T.H. Osborne “The radial electric field as a measure for field penetration of resonant magnetic perturbations” *Nuclear Fusion*, Volume 54, Article 082003, August 2014.
- [J32] C. Chrystal, K.H. Burrell, B.A. Grierson, G.M. Staebler, W.M. Solomon, W.X. Wang, T.L. Rhodes, L. Schmitz, J.E. Kinsey, L.L. Lao, J.S. deGrassie, **S. Mordijck**, O. Meneghini “Testing neoclassical and turbulent effects on poloidal rotation in the core of DIII-D” *Physics of Plasmas*, Volume 21, Article 0072504, July 2014.
- [J33] O. Schmitz, T.E. Evans, M.E. Fenstermacher, M.J. Lanctot, **S. Mordijck**, R.A. Moyer, H. Reimerdes and the DIII-D Team “Formation of a three-dimensional plasma

boundary after decay of the plasma response to resonant magnetic perturbation fields” *Nuclear Fusion*, Volume 54, Article 12001, January 2014.

- [J34] G.R. McKee, Z. Yan, C. Holland, R.J. Buttery, T.E. Evans, R.A. Moyer, **S. Mordijck**, R. Nazikian, T.L. Rhodes, O. Schmitz and M.R. Wade “Increase of turbulence and transport with resonant magnetic perturbations in ELM-suppressed plasmas on DIII-D” *Nuclear Fusion*, Volume 53, Article 113011, November 2013.
- [J35] D.N. Hill and the DIII-D team “DIII-D research towards resolving key issues for ITER and steady-state tokamaks” *Nuclear Fusion*, Volume 53, Article 104001, October 2013.
- [J36] H. Meyer, et al. **S. Mordijck**, and the MAST and NBI teams “Overview of Physics Results from MAST towards ITER/DEMO and the MAST upgrade” *Nuclear Fusion*, Volume 53, Article 104008, October 2013.
- [J37] J.D. Callen, A.J. Cole, C.C. Hegna, **S. Mordijck**, R.A. Moyer “RMP effects on pedestal structure and ELMs” *Nuclear Fusion*, Volume 52, Article 114016, November 2012.
- [J38] **S. Mordijck**, E.J. Doyle, G.R. McKee, R.A. Moyer, T.L. Rhodes, L. Zeng, M.E. Fenstermacher, K.W. Gentle, H. Reimerdes, O. Schmitz, W.M. Solomon, G.M. Staebler, G. Wang “Changes in particle transport as a result of resonant magnetic perturbations in DIII-D” *Physics of Plasmas*, Volume 19, Article 056503, May 2012.
- [J39] O. Schmitz, T.E. Evans, M.E. Fenstermacher, M. Lehnen, H. Stoschus, E.A. Unterberg, J.W. Coenen, H. Frerichs, M.W. Jakubowski, R. Laengner, C.L. Lasnier, **S. Mordijck**, R.A. Moyer, T.H. Osborne, H. Reimerdes, D. Reiter, U. Samm, B. Unterberg and the DIII-D and TEXTOR teams “Resonant features of energy and particle transport during application of resonant magnetic perturbation fields at TEXTOR and DIII-D” *Nuclear Fusion*, Volume 52, Article 043005, April 2012.
- [J40] **S. Mordijck**, R.A. Moyer, G.R. McKee “Changes in density fluctuations as a result of resonant magnetic perturbations correlate with the density inverse scale length” *Physics of Plasmas*, Volume 19, Article 024504, February 2012.
- [J41] **S. Mordijck**, R.A. Moyer, A. Kirk, P. Tamain, D. Temple, G.R. McKee and E. Nardon “Comparison of resonant magnetic perturbation-induced particle transport changes in H-mode (DIII-D) and L-mode (MAST)” *Plasma Physics and Controlled Fusion*, Volume 53, Article 122001, November 2011.
- [J42] B. Lloyd, et al. **S. Mordijck**, and the MAST and NBI teams “Overview of Physics Results from MAST” *Nuclear Fusion*, Volume 51, Article 094013, September 2011.
- [J43] C.M. Greenfield and the DIII-D team “DIII-D contributions towards the scientific basis for sustained burning plasmas” *Nuclear Fusion*, Volume 51, Article 094009, September 2011.
- [J44] A. Kirk, E. Nardon, P. Tamain, P. Denner, H. Meyer, **S. Mordijck**, D. Temple and the MAST team “The effect of resonant magnetic perturbations on L and H-mode plasmas on MAST” *Journal of Nuclear Materials (Plasma Surface Interactions 2010)*, Volume 415, Pages 910-913, August 2011.
- [J45] M.W. Jakubowski, T.E. Evans, M.E. Fenstermacher, C.J. Lasnier, R.C. Wolf, L.R. Baylor, J.A. Boedo, K.H. Burrell, J.S. deGrassie, P. Gohil, **S. Mordijck**, R. Laengner, A.W. Leonard, R.A. Moyer, T.W. Petrie, C.C. Petty, R.I. Pinsker, T.L. Rhodes, J.G. Watkins “Toroidally resolved structure of divertor heat flux in RMP H-mode

discharges on DIII-D” *Journal of Nuclear Materials (Plasma Surface Interactions 2010)*, Volume 415, Pages 901-905, August 2011.

- [J46] T.W. Petrie, T.E. Evans, M.E. Fenstermacher, **S. Mordijck**, N.H. Brooks, J.R. Ferron, B. Hudson, A.W. Hyatt, C.J. Lasnier, A.W. Leonard, T.C. Luce, R.A. Moyer, P.A. Politzer, M.J. Schaffer, P.B. Snyder, J.G. Watkins “First results examining the compatibility of RMP ELM suppression with the radiating divertor in DIII-D” *Journal of Nuclear Materials (Plasma Surface Interactions 2010)*, Volume 415, Pages 906-909, August 2011.
- [J47] T.W. Petrie, T.E. Evans, N.H. Brooks, M.E. Fenstermacher, J.R. Ferron, C.T. Holcomb, B. Hudson, A.W. Hyatt, T.C. Luce, C.J. Lasnier, **S. Mordijck**, R.A. Moyer, T.H. Osborne, P.A. Politzer, M.E. Rensink, M.J. Schaffer, P.B. Snyder and J.G. Watkins “Results from radiating divertor experiments with RMP ELM suppression and mitigation” *Nuclear Fusion*, Volume 51, Article 073003, May 2011.
- [J48] A. Kirk, Y. Liu, E. Nardon, P. Tamain, P. Cahyna, I. Chapman, P. Denner, H. Meyer, **S. Mordijck**, D. Temple and the MAST team “Magnetic perturbation experiments on MAST L- and H-mode plasmas using internal coils” *Plasma Physics and Controlled Fusion*, Volume 53, Article 056011, April 2011.
- [J49] M.W. Jakubowski, T.E. Evans, M.E. Fenstermacher, C.J. Lasnier, O. Schmitz, R.C. Wolf, L.R. Baylor, J.A. Boedo, K.H. Burrell, H. Frerichs, J.S. deGrassie, P. Gohil, **S. Mordijck**, R.A. Moyer, A.W. Leonard, D. Reiter, U. Samm, M.J. Schaffer, T.H. Osborne, E.A. Unterberg, J.G. Watkins “Influence of the resonant magnetic perturbation on the plasma boundary in DIII-D” *Contributions to plasma physics*, Volume 50, Pages 701-707, July 2010.
- [J50] **S. Mordijck**, L.W. Owen, R.A. Moyer “Increased particle transport due to resonant magnetic perturbations modeled with a vacuum field line tracing code and a 2D fluid code” *Nuclear Fusion*, Volume 50, Article 034006, February 2010.
- [J51] E.A. Unterberg, O. Schmitz, T.E. Evans, R. Maingi, N.H. Brooks, M.E. Fenstermacher, **S. Mordijck**, R.A. Moyer, D.M. Orlov “The effects of an open and closed divertor on particle exhaust during edge-localized mode suppression by resonant magnetic perturbations in DIII-D” *Nuclear Fusion*, Volume 50, Article 034011, February 2010.
- [J52] D.M. Orlov, R.A. Moyer, T.E. Evans, **S. Mordijck**, T.H. Osborne, M.E. Fenstermacher, P. Snyder, E.A. Unterberg “Numerical analysis of effects of normalized plasma pressure on RMP ELM suppression in DIII-D” *Nuclear Fusion*, Volume 50, Article 034010, February 2010.
- [J53] O. Schmitz, T.E. Evans, M.E. Fenstermacher, E.A. Unterberg, M.E. Austin, B.D. Bray, N.H. Brooks, H. Frerichs, M. Groth, M.W. Jakubowski, C.J. Lasnier, M. Lehnen, A.W. Leonard, **S. Mordijck**, R.A. Moyer, T.H. Osborne, D. Reiter, U. Samm, M.J. Schaffer, B. Unterberg, W.P. West and the DIII-D and TEXTOR Research Team “Resonant pedestal pressure reduction induced by a thermal transport enhancement due to stochastic magnetic boundary layers in high temperature plasmas” *Physical Review Letters*, Volume 103, Article 165005, October 2009.
- [J54] E.J. Strait for the DIII-D team “DIII-D research in support of ITER” *Nuclear Fusion*, Volume 49, Article 104008, October 2009.
- [J55] M.W. Jakubowski, T.E. Evans, M.E. Fenstermacher, M. Groth, C.J. Lasnier, A.W. Leonard, O. Schmitz, J.G. Watkins, T. Eich, W. Fundamenski, R.A. Moyer, R.C. Wolf,

- L.B. Baylor, J.A. Boedo, K.H. Burrell, H. Frerichs, J.S. deGrassie, P. Gohil, I. Joseph, **S. Mordijck**, M. Lehnen, C.C. Petty, R.I. Pinsker, D. Reiter, T.L. Rhodes, U. Samm, M.J. Schaffer, P.B. Snyder, H. Stoschus, T. Osborne, B. Unterberg, E. Unterberg and W.P. West “Overview of the results on divertor heat loads in RMP controlled H-mode plasmas on DIII-D” *Nuclear Fusion*, Volume 49, Article 095013, September 2009.
- [J56] E.A. Unterberg, T.E. Evans, R. Maingi, N.H. Brooks, M.E. Fenstermacher, **S. Mordijck**, R.A. Moyer “Demonstration of Particle Exhaust Control During ELM suppression by Resonant Magnetic Perturbations in DIII-D” *Nuclear Fusion*, Volume 49, Article 092001, September 2009
- [J57] **S. Mordijck**, R.A. Moyer, T.E. Evans, X. Bonnin, J. Canik, D. Coster, M. Groth, R. Maingi, T.H. Osborne, L.W. Owen, T.W. Petrie, D. Reiter, J.G. Watkins, and E.A. Unterberg “Fluid modeling of an ELMing H-mode and a RMP H-mode” *Journal of Nuclear materials 2009 (Plasma surface interactions 2008)*, Volumes 390-391, Pages 299-302, June 2009.
- [J58] E.A. Unterberg, N.H. Brooks, T.E. Evans, M.E. Fenstermacher, D.L. Hillis, R. Maingi, **S. Mordijck**, R.A. Moyer, T.H. Osborne, T.W. Petrie, J.G. Watkins “Experimental comparison of recycling and pumping changes during resonant magnetic perturbation experiments at low and high triangularity” *Journal of Nuclear materials 2009 (Plasma surface interactions 2008)*, Volumes 390-391, Pages 486-489, June 2009.
- [J59] O. Schmitz, T.E. Evans, M.E. Fenstermacher, H. Frerichs, M.W. Jakubowski, M.J. Schaffer, A. Wingen, W.P. West, N.H. Brooks, K.H. Burrell, J.S. deGrassie, Y. Feng, K.H. Finken, P. Gohil, M. Groth, I. Joseph, C.J. Lasnier, M. Lehnen, A.W. Leonard, **S. Mordijck**, R.A. Moyer, A. Nicolai, T.H. Osborne, D. Reiter, U. Samm, K.H. Spatschek, H. Stoschus, B. Unterberg, E.A. Unterberg, J.G. Watkins, R. Wolf and the DIII-D and TEXTOR Teams “Aspects of three dimensional transport for ELM control experiments in ITER-similar shape plasmas at low collisionality in DIII-D” *Plasma Physics and Controlled Fusion*, Volume 50, Article 124029, 2008.

- **International Conference Proceedings**

- [C1] Ryan A Chaban, S. Mordijck, T.H. Osborne, M. Knolker, K.E. Thome, F. Laggner, A.M. Rosenthal “Isotope Effect on Pedestal Structure in DIII-D” *Conference proceedings 48th EPS Conference 2022*.
- [C2] Antti Salmi, Tuomas Tala, D King, J Karhunen, S Mordijck, RB Morales, V Naulin, JET Contributors “Gas scan to probe fuelling through the H-mode pedestal in JET” *Conference proceedings 47th EPS Conference 2021*.
- [C3] S. Banerjee, **S. Mordijck**, K. Barada, L. Zeng, T.L. Rhodes, R. Groebner, T. Osborne, P.B. Snyder, B. Grierson, A. Diallo, F. Laggner, S. Haskey, Z. Yan “Effect of pedestal fluctuations on inter-ELM pedestal recovery and ELM characteristics in ECH dominated discharges in DIII-D” *Conference proceedings of the 18th IAEA Fusion Energy Conference 2021*.
- [C4] O. Menghini, G. Snoep, S.P. Smith, A. Tema, B.A. Grierson, E.A. Belli, J. Candy, P.B. Snyder, G.M. Staebler, **S. Mordijck**, and J. Citrin “Neural-Network Accelerated Coupled Core-Pedestal Simulations with Self-Consistent Transport of Impurities” *Conference proceedings of the 17th IAEA Fusion Energy Conference 2018*.

- [C5] P.B. Snyder, J.W. Hughes, T.H. Osborne, C. Paz-Soldan, W. Solomon, D. Eldon, T.E. Evans, T. Golfinopoulos, R.J. Groebner, A.E. Hubbard, M. Knolker, B. LaBombard, F.M. Laggner, O. Meneghini, **S. Mordijck**, S. Scott, H.R. Wilson, and Y.B. Zhu "High Fusion Performance in Super H-mode Experiments on Alcator C-Mod and DIII-D" *Conference proceedings of the 17th IAEA Fusion Energy Conference 2018*.
- [C6] **S. Mordijck**, L. Zeng, T.L. Rhodes, L. Schmitz, J.W. Hughes, T. Tala, A. Salmi, Y. Baranov, C.C. Petty, R.J. Groebner, and A.L. Moser "Particle transport from the Bottom Up" *Conference proceedings of the 17th IAEA Fusion Energy Conference 2018*.
- [C7] T. Tala, J.W. Hughes, **S. Mordijck**, H. Nordman, A. Salmi, C. Bourdelle, J. Citrin, C. Agatha, C. Giroud, J.C. Hillesheim, A.E. Hubbard, C.F. Maggi, P. Mantica, M. Maslov, L. Meneses, S. Menmuir, V. Naulin, M. Oberparleiter, A.C.C. Sips, A. Skyman, D. Tegnered, M. Tsalas, E.A. Tolman, and H. Weisen, The JET contributors "Core Density Peaking Experiments in JET, DIII-D and C-Mod in Various Operational Scenarios Driven by Fuelling or Transport" *Conference proceedings of the 17th IAEA Fusion Energy Conference 2018*.
- [C8] A. Salmi, T. Tala, A. Järvinen, D. Dunai, R. Gomes, P. Lomas, L. Meneses, **S. Mordijck**, V. Naulin, J. Juul Rasmussen, M. Romanelli, A.C.C. Sips, and JET Contributors "Particle sources and SOL dynamics in JET strike point sweeping experiments" *Conference proceedings 45th EPS Conference 2018*.
- [C9] A. Salmi, R. Gomes, J. Harrison, A. Järvinen, L. Meneses, **S. Mordijck**, V. Naulin, J. Juul Rasmussen, T. Tala, A. Thrysoe, A. Wynn, E. Belonohy, A. Loarte, M. Maslov, M. Romanelli, A.C.C. Sips, M. Tsalas and JET Contributors "Investigation of gas fueling characteristics in JET experiments" *Conference proceedings 44th EPS Conference 2017*.
- [C10] T. Tala, H. Nordman, A. Salmi, D. Tegnered, C. Bourdelle, P. Carvalho, A. Czarnecka, L. Giacomelli, C. Giroud, E. Belonohy, J. Hillesheim, C. Maggi, P. Mantica, M. Maslov, L. Meneses, S. Menmuir, S. Mordijck, V. Naulin, J. Juul Rasmussen, G. Sips, M. Tsalas, H. Weisen and JET contributors "Four separate Dimensionless Collisionality Scans in Various JET scenarios" *Conference proceedings 44th EPS Conference 2017*.
- [C11] **S. Mordijck**, X. Wang, L. Zeng, E.J. Doyle, T.L. Rhodes, L. Schmitz, C. Chrystal, Z. Yan and G.R. McKee "Role of Turbulence in Determining Particle Transport and Confinement" *Conference proceedings of the 16th IAEA Fusion Energy Conference 2016*.
- [C12] T. Tala, A. Salmi, C. Bourdelle, L. Giacomelli, C. Giroud, R. Gomes, J. Hillesheim, A. E. Järvinen, C. Maggi, P. Mantica, M. Maslov, L. Meneses, S. Menmuir, S. Moradi, S. Mordijck, V. Naulin, H. Nordman, J. J. Rasmussen, A. Sips, J. Svensson, M. Tsalas, and H. Weisen "Density peaking in JET: Driven by fueling or transport" *Conference proceedings of the 16th IAEA Fusion Energy Conference 2016*.
- [C13] **S. Mordijck**, C. Chrystal, B.A. Grierson, W.H. Ko, T.L. Rhodes, L. Schmitz, L. Zeng, P.H. Diamond, E.J. Doyle, C.C. Petty, A. Salmi, W.M. Solomon, G.M. Staebler, T. Tala, X. Wang, "Density driven rotation changes in DIII-D H-mode plasmas" *Conference proceedings 43rd EPS Conference 2016*.
- [C14] A. Salmi, T. Tala, P. Mantica, A. Järvinen, L. Meneses, **S. Mordijck**, V. Naulin, J. Juul Rasmussen, J. Svensson, L. Giacomelli, R. Gomes, M. Groth, T. Koskela, C. Maggi, M. Maslov, G. Sips H. Weisen and JET contributors "Particle source and edge

- transport studies in JET H-mode gas puff modulation experiments” *Conference proceedings 42nd EPS Conference 2015*.
- [C15] T. Tala, P. Mantica, A. Salmi, C. Bourdelle, C. Giroud, J. Hillesheim, C. Maggi, L. Meneses, M. Maslov, S. Menmuir, S. Moradi, **S. Mordijck**, V. Naulin, H. Nordman, J. Juul Rasmussen, G. Sips, A. Sirinelli, M. Tsalias, H. Weisen and JET contributors “Dimensionless Collisionality Scans for Core Particle Transport in JET” *Conference proceedings 42nd EPS Conference 2015*.
- [C16] **S. Mordijck**, L. Zeng, L. Schmitz, E.J. Doyle, W-H. Ko, X. Wang, T.L. Rhodes, G. Staebler, P.H. Diamond, B. Grierson, G.R. McKee, C.C. Petty, A. Salmi, W. Solomon, T. Tala and the DIII-D team “Role of turbulence regime and ExB shear upon particle transport in DIII-D H-mode plasmas” *Conference proceeding of the 25th IAEA Fusion Energy Conference 2014*.
- [C17] A. Salmi, T. Tala, C. Bourdelle, H. Bufferand, P. Mantica, L. Meneses, **S. Mordijck**, P. Tamain, M. Groth, J. Hillesheim, C. Maggi, M. Maslov, V. Naulin, J. Juul Rasmussen, G. Sips, A. Sirinelli, M. Tsalias, H. Weisen, M. Wischmeier and JET-EFDA contributors “Gas puff modulation experiments in JET L- and H-mode plasmas” *Conference proceeding 41st EPS Conference 2014*.
- [C18] E.J. Doyle, L. Zeng, G.M. Staebler, T.E. Evans, T.C. Luce, G.R. McKee, **S. Mordijck**, R.A. Moyer, W.A. Peebles, C.C. Petty, T.L. Rhodes “Particle transport results from collisionality scans and perturbative experiments on DIII-D” *Conference proceeding of 24th IAEA Fusion Energy Conference 2012*.
- [C19] G.R. McKee, Z. Yan, C. Holland, R.J. Buttery, T.E. Evans, R.A. Moyer, **S. Mordijck**, R. Nazikian, T.L. Rhodes, O. Schmitz and M.R. Wade “Turbulence and transport response to resonant magnetic perturbations in ELM-suppressed plasmas on DIII-D” *Conference proceeding of 24th IAEA Fusion Energy Conference 2012*.
- [C20] T.W. Petrie, T.E. Evans, N.H. Brooks, M.E. Fenstermacher, J.R. Ferron, B. Hudson, A.W. Hyatt, T.C. Luce, C.J. Lasnier, **S. Mordijck**, P.A. Politzer, M.E. Rensink, M.J. Schaffer, P.B. Snyder, J.G. Watkins “Results from Radiating Divertor Experiments with RMP ELM Suppression” *Conference proceeding of 23rd IAEA Fusion Energy Conference 2010*.
- [C21] O. Schmitz, T.E. Evans, M.E. Fenstermacher, H. Stoschus, E.A. Unterberg, J.W. Coenen, H. Frerichs, M.W. Jakubowski, R. Laengner, C.J. Lasnier, **S. Mordijck**, R.A. Moyer, T.H. Osborne, H. Reimerdes, D. Reiter, U. Samm, B. Unterberg and the DIII-D and TEXTOR teams “Key results from the DIII-D/TEXTOR Collaboration on the Physics of Stochastic Boundaries projected to ELM Control at ITER” *Conference proceeding of 23rd IAEA Fusion Energy Conference 2010*.
- [C22] A. Kirk, E. Nardon, P. Tamain, P. Denner, Y. Liu, H. Meyer, **S. Mordijck**, D. Temple and the MAST team “Magnetic perturbation experiments on MAST using internal coils” *Conference proceeding of 23rd IAEA Fusion Energy Conference 2010*.
- [C23] B. Lloyd, et al. **S. Mordijck**, and the MAST and NBI teams “Overview of Physics Results from MAST” *Conference proceeding of 23rd IAEA Fusion Energy Conference 2010*.
- [C24] T.E. Evans, M.E. Fenstermacher, M. Jakubowski, R.A. Moyer, T.H. Osborne, M.J. Schaffer, O. Schmitz, J.G. Watkins, L. Zeng, L.R. Baylor, J.A. Boedo, K.H. Burrell, J.S. deGrassie, P. Gohil, I. Joseph, C.J. Lasnier, A.W. Leonard, **S. Mordijck**, C.C.

Petty, R.I. Pinsker, T.L. Rhodes, J.C. Rost, P.B. Snyder, E. Unterberg W.P. West  
“Operating Characteristics in DIII-D ELM-Suppressed RMP H-modes with ITER  
Similar Shapes” *Conference proceeding of 22nd IAEA Fusion Energy Conference 2008.*

- **Reports**

- [M1] **APS DPP CPP committee** “A Community Plan for Fusion Energy and Discovery Plasma Sciences” *Report of the 2019–2020 American Physical Society Division of Plasma Physics Community Planning Process* March 2020.
- [M2] **S. Mordijck**, R. Groebner, J. Hughes, A. Diallo ”Role of transport versus fueling upon pedestal density” *DOE FES Joint Research Target FY2019.*
- [M3] **S. Mordijck** ”Final Technical Report: Development of long-pulse heating and current drive actuators and operational techniques compatible with a high-Z divertor and first wall” *United states 2018* doi:10.2172/1430223  
[https://www.osti.gov/servlets/purl/1430223.](https://www.osti.gov/servlets/purl/1430223)

- **Miscellaneous**

- [M1] **S. Mordijck** “Taking Control of Fusion Reactor Instabilities”, *Physics Magazine*, October 2022.
- [M2] D. Schaffner, E Kostadinova, C. Kuranz, **S. Mordijck**, L. Rachmeler, S. Chakraborty Thakur, M. Abler “Just Say Plasma” *White Paper* submitted to Solar and Space Science Decadal Survey 2024-2033, September 2022.
- [M3] **S. Mordijck**, Carlos Paz-Soldan, François Waelbroeck “University Participation at the center of the ITER Research Program” *White Paper* Fusion Energy Sciences Research Needs Workshop, March 2022.
- [M4] **S. Mordijck** “Nuclear Fusion Breakthrough” Live Interview, *BBC WORLD*, February 9, 2022.
- [M5] “Saskia Mordijck: Studying plasma, fighting climate change” Interview, *The Flat Hat*, January 2020.
- [M6] **S. Mordijck** ”Nuclear Energy Symposium” Panel, *W&M Environmental Law and Policy Review*, February, 2017.
- [M7] “Role of fusion research at W&M” Interview, *Ringing Far and Near*, August, 2013.
- [M8] **S. Mordijck** “How will ITER be affected by density loss when limiting the transient heat losses caused by instabilities?” Online Article, *Labtalk from IOPScience*, May 29th 2012.
- [M9] **S. Mordijck** “Closer to a solution” Ideation magazine, W&M Alumni Magazine, Phys.org website, Fall 2012.



## Presentations

---

- **Invited talks**

- [I1] "Universities at the center of the ITER US research team", *Fusion Energy Sciences Research Needs Workshop*, Online seminar, March 23, 2022
- [I2] "A journey to build a sun on earth" *CUWIP IAEA*, Online seminar, January, 2022.
- [I3] "The pedestal density structure with reduced neutral fueling" *63rd APS DPP meeting*, Pittsburgh, November, 11, 2021.
- [I4] "The role of turbulence in determining the density profile in magnetic confinement devices" *JPP Frontiers of Plasma Physics Colloquium*, Online seminar, September 23, 2021.
- [I5] "Pedestal particle transport in high opacity regimes on DIII-D and C-Mod" *47th EPS meeting on plasma physics*, Online, June, 23, 2021.
- [I6] "Electron density: The role of fueling versus transport" *Socal seminar*, Online seminar by UCSD, UCI and UCLA, May, 25, 2021.
- [I7] "The plasma density from the bottom up" *Physics Seminar UT Austin*, Austin, Texas, March 10, 2021
- [I8] "Role of transport versus fueling upon the pedestal density" *3rd IAEA technical meeting on divertor concepts*, Vienna, Austria, November 6, 2019.
- [I9] "Is fueling what set the density pedestal structure?" *ECC Technical Meeting*, Fort Lauderdale, Florida, USA, October 22, 2019.
- [I10] "Overview of density pedestal structure: Role of fueling versus transport" *17th H-mode workshop*, Shanghai, China, October 11, 2019.
- [I11] "The plasma density from the top to bottom" *Physics seminar W&M*, Williamsburg, Virginia, USA, March 11, 2019.
- [I12] "Role of Fueling versus Transport in determining the core density profile" *2nd Asia-Pacific Conference on Plasma Physics*, Kanazawa, Japan, November 12, 2018.
- [I13] "Changes in Particle transport as a result of resonant magnetic perturbations" *Plasma Seminar University of Maryland*, College Park, MD, October 10, 2018.
- [I14] "Particle transport from the bottom up" *Plasma Seminars, UCLA*, Los Angeles, CA, May 3, 2018.
- [I15] "Particle transport from the bottom up" *Plasma Physics Seminar, PSFC MIT*, Cambridge, MA, March 9, 2018.
- [I16] "Particle transport from the bottom up" *Physics Seminar, University of Wisconsin - Madison*, Madison, WI, February 12, 2018.
- [I17] "The role of the plasma edge in achieving high performance fusion" *Physics Seminar, Virginia Commonwealth University*, Richmond, VA, December 1, 2017.
- [I18] "Changes in particle transport as a result of Resonant Magnetic Perturbations" *Plasma seminar series, University of York*, York, UK, September 22, 2017.
- [I19] "Series of Lectures on Edge Turbulence, H-mode, Resonant Magnetic Perturbations and changes in transport" *Seminar Physics department PKU*, Beijing, China, August - September, 2016.

- [I20] “The role of the plasma edge in achieving high performance fusion energy” *Seminar Applied Science, The College of William and Mary, Williamsburg, VA, May, 25, 2016.*
- [I21] “Necessity of core-edge integration to achieve high performance fusion energy”, *Seminar Plasma Science Center, EPFL, Lausanne, March 21, 2016.*
- [I22] “Changes in transport with Resonant Magnetic Perturbations in Tokamaks” *Seminar IPP Greifswald, Greifswald, March 18, 2016.*
- [I23] “Changes in transport with Resonant Magnetic Perturbations in Tokamaks” *Physics Seminar UCSD, La Jolla, January 25, 2016.*
- [I24] “The effects of 3D fields on turbulence in DIII - D” *Stochasticity in Fusion Plasmas, Bad Honnef, September, 11, 2015.*
- [I25] “The effects of 3D fields on turbulence in DIII - D” *42nd EPS meeting on plasma physics, Lisbon, June, 23, 2015.*
- [I26] “Changes in particle transport as a result of Resonant Magnetic Perturbations” *Plasma Physics Seminar UT Austin, Austin, September, 12, 2014.*
- [I27] “The role of the plasma edge in achieving high performance fusion energy” *Seminar Princeton University, Princeton, NJ, March, 26, 2014.*
- [I28] “What toroidal rotation can reveal about the penetration of magnetic fields” *Stochasticity in Fusion Plasmas, Juelich, Germany, March 18, 2013.*
- [I29] “Role of the electric field for ELM suppression and particle transport with RMPs in DIII-D” *Monday Seminar, IPP-Garching, Garching, Germany, March 11, 2013.*
- [I30] “Experimental changes in particle transport from resonant magnetic perturbations (RMPs) in DIII-D” *Physics seminar, PPPL, Princeton, New Jersey, USA, March 8, 2012.*
- [I31] “Experimental changes in particle transport from resonant magnetic perturbations (RMPs) in DIII-D” *Physics seminar, MIT, Boston, Massachusetts, USA, March 2, 2012.*
- [I32] “Experimental changes in particle transport from resonant magnetic perturbations (RMPs) in DIII-D” *Physics seminar, West Virginia University, Morgantown, West Virginia, USA, January 27, 2012.*
- [I33] “Particle transport modification due to resonant magnetic perturbations on the DIII-D tokamak” *53rd APS Meeting of the Division of Plasma Physics, Salt Lake City, Utah, USA, November 14, 2011.*
- [I34] “Particle transport modification due to resonant magnetic perturbations on the DIII-D tokamak” *Physics seminar, The College of William and Mary, Williamsburg, Virginia, USA, November 4, 2011.*
- [I35] “Particle transport as result of Resonant Magnetic Perturbations.” *Stochasticity in Fusion Plasmas, Juelich, Germany, April, 2011.*
- [I36] “Experimental changes in particle transport from Resonant Magnetic Perturbations (RMPs) in DIII-D.” *Applied Science Seminar, The College of William and Mary, Williamsburg, Virginia, USA, March 30, 2011.*
- [I37] “Modeling of particle transport in ELMing and RMP H-modes”, *Stochasticity in Fusion Plasmas, Juelich, Germany, March, 2009.*

- **Contributed talks**

- [C1] "Pedestal structure as a function of neutral opacity in DIII-D and C-Mod plasmas" *US-TTF Virtual Conference*, Virtual, April 23, 2021.
- [C2] "Overview on density pedestal structure: Role of fueling versus transport" *61st APS-DPP meeting*, Fort Lauderdale, Florida, USA, October 23, 2019.
- [C3] "Role of opacity/fueling in determining the pedestal density structure" *Taskforce meetings JET*, Culham, UK, September 25, 2018.
- [C4] "The role of turbulence and collisionality in determining the core density profile in DIII-D" *ITPA Transport and Confinement*, Caderache, France, September 19, 2018.
- [C5] "Role of opacity/fueling in determining the pedestal density structure" *ITPA Transport and Confinement*, Caderache, France, September 18, 2018.
- [C6] "The role of opacity/fueling on pedestal density structure" *Pedestal group DIII-D*, San Diego, CA, USA, August 22, 2018.
- [C7] "The Role of Turbulence and Collisionality in Determining the Core Density Profile in DIII-D" *Transport group DIII-D*, San Diego, CA, USA, August 7, 2018.
- [C8] "2019 JRT" *Core-Edge Integration TaskForce DIII-D*, San Diego, CA, USA, July 26, 2018.
- [C9] "Role of turbulence in determining particle transport in DIII-D" *59th APS-DPP meeting contributed talk*, Milwaukee, WI, USA, October 23, 2017.
- [C10] "Fueling versus Particle Pinch in opaque edge plasmas (TC-27)" *ITPA Transport and Confinement*, Helsinki, Finland, September 18, 2017.
- [C11] "Particle transport and collisionality in DIII-D" *ITPA Transport and Confinement*, Princeton, New Jersey, USA, May 2, 2017.
- [C12] "Update on TC-27" *ITPA Transport and Confinement*, Naka, Japan, October 26, 2016.
- [C13] "DIII-D particle transport studies" *ITPA Transport and Confinement*, Garching, October 23, 2015.
- [C14] "TC-27: Inward pinch versus neutral fueling in opaque SOL plasmas" *ITPA Transport and Confinement*, Caderache, May, 6, 2015.
- [C15] "The effect of 3D fields on turbulence in DIII-D" *Transport Task Force Workshop*, Salem, April, 30, 2015.
- [C16] "Role of radial electric field in determining the width of the stochastic layer" *ITPA Pedestal and Edge Physics*, Caderache, October, 20, 2014.
- [C17] "Changes in particle and momentum transport across ITG-TEM regime in DIII-D H-mode plasmas" *Transport Task Force Workshop*, San Antonio, April, 24, 2014.
- [C18] "Changes in particle transport as a function of collisionality and rotation" *55th Annual APS DPP Meeting*, Denver, CO, USA, November, 12, 2013.
- [C19] "Particle transport studies on DIII-D using gas puff modulation" *ITPA Transport & Confinement*, Kyushu, October 9, 2013.
- [C20] "Gas puff modulation experiments to study particle transport on DIII-D" *TF meeting at CCFE*, Culham, UK, September 19, 2013.
- [C21] "The radial electric field as a measure for field penetration of Resonant Magnetic Perturbations" *Friday Science Meeting*, San Diego, USA, September 6, 2013.

- [C22] “Short update on experiment on momentum and particle transport” *Friday Science Meeting*, San Diego, USA, May 31, 2013.
- [C23] “Particle transport changes as a result of RMPs” *Transport TaskForce*, Annapolis, Maryland, USA, April 12, 2012.
- [C24] “Particle transport changes as a result of RMPs” *ITPA Pedestal and Edge Physics*, Hefei, China, April 4, 2012.
- [C25] “Investigation of correlation between RMPs and density pump-out on MAST and DIII-D” *51st APS Meeting of the Division of Plasma Physics*, Atlanta, Georgia, USA, November 2-6, 2009.
- [C26] “Investigation of correlation between RMPs and density pump-out on MAST and DIII-D” *Science Meeting MAST*, UKAEA, Culham, UK, October, 2009.
- [C27] “Investigation of correlation between RMPs and density pump-out on MAST and DIII-D” *17th ITPA Pedestal Group*, PPPL, Princeton, USA, October, 2009.
- [C28] “Increased particle transport due to RMP modeled with TRIP3D and SOLPS5” *Friday Science Meeting*, General Atomics, San Diego, USA, May, 2009.
- [C29] “Modeling of particle transport in ELMing and RMP H-modes”, *Transport TaskForce*, San Diego, USA, April, 2009.

## Memberships

---

- University Fusion Association member since 2018
- US Burning Plasma Organization member since 2012
- American Physical Society member since 2007