


PHD THESIS


TECHNICAL REPORTS

(UNPUBLISHED)


CONFERENCE PAPERS


Posters


**Talks**

“Global Stability of High Beta Spherical Tokamak Plasma and Initial Implementation of Machine Learning Techniques Supporting Disruption Prediction”

“Disruptivity and density limits in MAST and other tokamaks”
- 23rd MHD Stability Control Workshop, UCLA, Los Angeles, California, 11/13/2018.

“Disruptivity and density limits in MAST and other tokamaks”

“Characterization and forecasting of global and tearing mode stability for tokamak disruption avoid-
“Disruption event characterization and forecasting of global and tearing mode stability for tokamaks”
  • 2nd IAEA Technical Meeting on Fusion Data Processing, Validation and Analysis, Cambridge, Massachusetts, 5/31/2017.

“Characterization and Forecasting of Unstable Resistive Wall Modes in NSTX and NSTX-U”
  • 58th Annual Meeting of the APS Division of Plasma Physics, San Jose, California, 11/4/2016.
  • 21st MHD Stability Control Workshop, General Atomics, San Diego, California, 11/7/2016.

“Kinetic Resistive Wall Mode Stabilization Physics in Tokamaks”
  • 18th International Congress on Plasma Physics, Kaohsiung, Taiwan, 6/28/2016.

“Modifications to Ideal Stability by Kinetic Effects for Disruption Avoidance”
  • 20th Workshop on MHD Stability Control, Princeton, New Jersey, 11/24/2015.

“Progress and Plans for NSTX Upgrade and Kinetic Resistive Wall Mode Stability”
  • University of Washington, Seattle, Washington, 10/26/2015.
  • Georgia Institute of Technology, Atlanta, Georgia, 4/14/2016.
  • Auburn University, Auburn, Alabama, 4/15/2016.

“Kinetic Resistive Wall Mode Stability Evaluation and Physics Insight Applications”

“Resistive Wall Mode Stability in NSTX and Benchmarked Kinetic Physics Calculations with MISK”
  • 18th Workshop on MHD Stability Control, Santa Fe, New Mexico, 11/18/2013.

“Measured Improvement of Global MHD Mode Stability at High-beta, and in Reduced Collisionality Spherical Torus Plasmas”
  • 55th Annual Meeting of the Division of Plasma Physics, Denver, Colorado, 11/14/2013.

“Global Mode Control and Stabilization for Disruption Avoidance in High-β NSTX Plasmas”
  • 17th Workshop on MHD Stability Control, New York, New York, 11/6/2012.

“Resistive Wall Mode Physics and Control to Sustain High Normalized Beta in NSTX”
  • 54th Annual Meeting of the Division of Plasma Physics, Providence, Rhode Island, 10/30/2012.

“Validation of RWM Kinetic Stability Model and Physics Implications in NSTX”
  • 16th Workshop on MHD Stability Control, San Diego, California, 11/20/2011.

“Resistive Wall Mode Stabilization to Sustain High Normalized Beta at Low Internal Inductance in NSTX”
  • 53rd Annual Meeting of the Division of Plasma Physics, Salt Lake City, Utah, 11/14/2011.

“Resistive Wall Mode Kinetic Stabilization Theory Advancements for Refined Comparison with Experiments”
  • 2011 International Sherwood Fusion Theory Conference, Austin, Texas, 5/2/2011.

“RWM Kinetic Stability Advancements for Improved Agreement with Experiments: Collisionality and Anisotropy”
  • Mini RWM Workshop, General Atomics, San Diego, California, 2/3/2011.
“Comparison of Resistive Wall Mode Kinetic Stabilization Theory and Experiment”
  • 15th Workshop on Active Control of MHD Stability, Madison, Wisconsin, 11/16/2010.

“The Role of Kinetic Effects, Including Plasma Rotation and Energetic Particles, in Resistive Wall Mode Stability”
  • 51st Annual Meeting of the Division of Plasma Physics, Atlanta, Georgia, 11/3/2009.
  • 14th Workshop on Active Control of MHD Stability, Princeton, New Jersey, 11/9/2009.

“Resistive Wall Mode Stability of NSTX.”

“Investigation of the Complex Relationship Between Plasma Rotation and Resistive Wall Mode Stabilization in NSTX.”
  • 13th Workshop on Active Control of MHD Stability, Austin, Texas, 11/24/2008.

“Confinement of Pure Electron Plasmas in the Columbia Non-neutral Torus”
  • Auburn University, Auburn, Alabama 11/14/2006 (U.S./ Japan workshop)
  • University of Maryland, College Park, Maryland 2/14/2007 (ICC workshop)

“Current Sheet Mass Leakage in a Pulsed Plasma Accelerator”
  • Princeton Plasma Physics Laboratory, Princeton, New Jersey 2/20/2004
  • Columbia University, New York, New York
  • University of Wisconsin, Madison, Wisconsin 1/7/2005
  • University of Washington, Seattle, Washington 1/31/2005
  • Caltech, Pasadena, California 2/3/2005
  • UCLA, Los Angeles, California 2/4/2005
  • Los Alamos National Laboratory, Los Alamos, New Mexico 2/7/2005
  • University of Maryland, College Park, Maryland 3/1/2005