Distinguished Doctoral Colloquium - Schedule of Events

11:00am - Welcome and Introductory Remarks

   Eric Wertheimer, Dean of the Graduate School

11:15am - 12:30pm - Distinguished Scholar Presentations

12:30pm - Closing Remarks

   Eric Wertheimer, Dean of the Graduate School

At this virtual event, we will honor the winners of the President's Award to Distinguished Doctoral Students.

This year's Distinguished Doctoral Award recipients will present a synopsis of their research geared towards a non-specialist audience.

President's Award to Distinguished Doctoral Students

Meghan Buckley, English - Warscapes: Mapping the American War in Iraq through Literature

Meghan Buckley is a PhD candidate in the department of English. Her dissertation research emphasizes that ecology and physical setting play an integral role in contemporary American and Iraqi memoirs, blogs, and fiction about the Iraq War and produces a new pseudo-physical terrain that she terms the “warscape.”

Xujia Chen, Mathematics - Steenrod pseudocycles, lifted cobordisms, and WDVV relations of string theory

Xujia Chen is a Ph.D. candidate in the Department of Mathematics, working at the interface of symplectic topology, enumerative algebraic geometry, and string theory. Her dissertation establishes the long-conjectured WDVV-type equations (recursion formulae) for real Gromov-Witten invariants in a variety of settings.

Sebastian Dick, Physics - Improving density functional theory with machine learning

Sebastian Dick is a Ph.D. candidate in the Department of Physics & Astronomy. His dissertation research examines how machine learning can be used to improve density functional theory calculations, leading to a faster and more accurate in silico design of new molecules and materials.

Sindhuja Tirumalai Govindarajan, Biomedical Engineering - Magnetic resonance imaging of multiple sclerosis pathology: computer aided detection and monitoring

Sindhuja Tirumalai Govindarajan received her Ph.D. in Biomedical Engineering in Dec 2020. Her dissertation research examined the structural changes in the brain associated with diminished cognitive performance in unimpaired young people with multiple sclerosis with the help of in vivo magnetic resonance imaging, advanced statistical and artificial intelligence methods.

Jonathan Rawski, Linguistics - Structure and Learning in Natural Language

Jonathan Rawski is a PhD Candidate in the Linguistics Department and the Institute for Advanced Computational Science. His work concerns the mathematics of language and learning. His dissertation studies the behavior of grammatical inference algorithms, uncovering precise computational conditions on successful language acquisition from limited data.