

present an Interdisciplinary Seminar with

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Online ecologies of distrust and hate



3:30 PM*, MARCH 10, 2020

Hallam Auditorium, Room 206@NIMBioS · 1122 Volunteer Blvd.

**Reception & refreshments at 3 pm*

Abstract: Distrust and hate thrive on the Internet. In addition to racism, anti-women, anti-Semitism, anti-immigrant, and anti-LGBTQ narratives, there is distrust and hate linked to the political world and upcoming U.S. elections, as well as distrust and hate in relation to establishment medicine and science, e.g. anti-vaccinations, climate change. Social media platforms such as Facebook have access to state-of-the-art software tools, yet appear unable to keep it under control. In this talk, I discuss why this might be using mathematical descriptions of ecologies living across networks-of-networks. I also show how the 'sociophysics' of heterogeneous objects offers a fresh understanding of such systems as interacting gels in a multi-dimensional space. I then discuss how this analysis is connected mathematically to the unexpected surge in online pro-ISIS support that arose several years ago.

Bio: Dr. Neil Johnson is a professor of physics at The George Washington University and heads up a new initiative in Complexity and Data Science which combines cross-disciplinary fundamental research with data science to attack complex real-world problems. He is a Fellow of the American Physical Society (APS) and is the recipient of the 2018 Burton Award from the APS. His research interests lie in the broad area of Complex Systems and 'many-body' out-of-equilibrium systems of collections of objects, ranging from crowds of particles to crowds of people and from environments as distinct as quantum information processing in nanostructures through to the online world of collective behavior on social media.