## Center for Quantum Mathematics And Physics QMAP Colloquíum



## March 1, 2019

4:10pm Mathematical Science Building, room 1147



## **Nathan Seiberg**

Institute for Advanced Study

## Symmetries, Duality, and the Unity of Physics

Nathan Seiberg is a Professor in the School of Natural Sciences at the Institute for Advanced Study in Princeton, NJ. His research focuses on various aspects of string theory, quantum field theory, and particle physics. He has made deep contributions to the understanding of the dynamics of quantum field theories, especially two-dimensional conformal field theories and supersymmetric quantum field theories. His exact solutions of supersymmetric systems have uncovered many new and unexpected phenomena, including the fundamental role of electric-magnetic duality in these theories. These exact solutions have led to many applications in physics and in mathematics. Recently, he



combined insights from his earlier work to shed new light on quantum field theories in three space-time dimensions, also of interest to condensed matter physics.

The talk starts at 4:10pm, refreshments will be served beforehand.

The Center for Quantum Mathematics and Physics (QMAP) is a new initiative at UC Davis aimed at fostering a vibrant research environment for addressing foundational questions in modern theoretical and mathematical physics.

For questions contact the organizers at trnka@ucdavis.edu or tudor@math.ucdavis.edu.

Center for Quantum Mathematics and Physics (QMAP): <u>http://qmap.ucdavis.edu</u> Department of Physics: <u>http://physics.ucdavis.edu</u> Department of Mathematics: <u>http://math.ucdavis.edu</u>