Institute for
CONDENSED MATTER THEORY
Physics in Engineering & LAS at Illinois

CALENDAR OF EVENTS http://physics.illinois.edu/bluesheet.asp

Monday, October 16, ICMT Seminar: "SU(2)-Invariant Topological Quantum Spin Liquids" Alexander Seidel; 12:00 pm in 190 ESB

Tuesday, October 17, Astronomy Colloquium: CANCELLED; 3:45 pm in 134 Astronomy

Wednesday, October 18, Astrophysics, Gravitation and Cosmology Seminar: "Measuring the Universe at Microwave, Infrared and Gamma-Ray Wavelengths" Chang Feng; 12:00 pm in 222 Loomis

Wednesday, October 18, QI/AMO Seminar; 1:00 pm in 280 MRL

Wednesday, October 18, Physics Colloquium: "Super Eddington Black Hole Accretion Flows" Jim Stone; 4:00 pm in 141 Loomis

Visitors:

ICMT Seminar

Title: "SU(2)-Invariant Topological Quantum Spin Liquids"

Speaker: Alexander Seidel, Washington University in St. Louis

Date: Monday, October 16 **Time/Location:** 12:00 pm / 190 ESB

Abstract: See here
https://physics.illinois.edu/calendar/event/10/16/2017/33276964

CALENDAR OF EVENTS http://physics.illinois.edu/bluesheet.asp

Monday, October 16, ICMT Seminar: "SU(2)-Invariant Topological Quantum Spin Liquids" Alexander Seidel; 12:00 pm in 190 ESB

Tuesday, October 17, Astronomy Colloquium: CANCELLED; 3:45 pm in 134 Astronomy

Wednesday, October 18, Astrophysics, Gravitation and Cosmology Seminar: "Measuring the Universe at Microwave, Infrared and Gamma-Ray Wavelengths" Chang Feng; 12:00 pm in 222 Loomis

Wednesday, October 18, QI/AMO Seminar; 1:00 pm in 280 MRL

Wednesday, October 18, Physics Colloquium: "Super Eddington Black Hole Accretion Flows" Jim Stone; 4:00 pm in 141 Loomis

Visitors:

Astrophysics, Gravitation and Cosmology Seminar

Title: "Measuring the Universe at Microwave, Infrared and Gamma-Ray Wavelengths"

Speaker: Chang Feng (UIUC)

Date: Wednesday, October 18

Time/Location: 12:00 pm / 222 Loomis

Abstract: See here https://physics.illinois.edu/calendar/event/10/18/2017/33274213

CALENDAR OF EVENTS http://physics.illinois.edu/bluesheet.asp

Monday, October 16, ICMT Seminar: "SU(2)-Invariant Topological Quantum Spin Liquids" Alexander Seidel; 12:00 pm in 190 ESB

Tuesday, October 17, Astronomy Colloquium: CANCELLED; 3:45 pm in 134 Astronomy

Wednesday, October 18, Astrophysics, Gravitation and Cosmology Seminar: "Measuring the Universe at Microwave, Infrared and Gamma-Ray Wavelengths" Chang Feng; 12:00 pm in 222 Loomis

Wednesday, October 18, QI/AMO Seminar; 1:00 pm in 280 MRL

Wednesday, October 18, Physics Colloquium: "Super Eddington Black Hole Accretion Flows" Jim Stone; 4:00 pm in 141 Loomis

Visitors:

Physics Colloquium

Title: "Super Eddington Black Hole Accretion Flows"

Speaker: Jim Stone (Princeton University)

Date: Wednesday, October 18

Time/Location: 4:00 pm / 141 Loomis

Abstract: Super Eddington accretion occurs in many systems, such as the inner regions of quasars and luminous AGN, ultra-luminous X-ray sources (ULXs), and tidal disruption events. Understanding such flows is important not only for interpreting the spectra and variability of these sources, but also to predict the rate of growth of black holes in the early universe, and to quantify energy and momentum feedback into the medium surrounding the black hole, a process likely to be important in controlling galaxy formation in the case of AGN. New results from a study of the magnetohydrodynamics of luminous accretion flows, in which radiation pressure dominates, will be presented. We have developed new numerical methods based on a formal solution of the time-dependent radiation transfer equations to study this regime. Our numerical simulations reveal new effects that require extension of standard thin-disk models. We discuss these results, and their implications for the astrophysics of accreting black holes.