

# LENS/CMP Seminars – 2018

In the Spring Semester 2018 all seminars were held on **Fridays at 2:30 pm** in **Swain West 214**, unless otherwise noted. In the Fall Semester 2018 all seminars were held on **Wednesdays at 3:30 pm** in **Swain West 214**, unless otherwise noted.

| Date                  | Speaker  | Title  | Host                                    |
|-----------------------|--|--|---|
| January 8             | <b>SPRING SEMESTER COMMENCES</b>                               |  |   |
| February 2<br>3:00 pm | Abu Ashik Md Irfan,<br>IU Physics                              | Candidacy seminar tba  | Gerardo Ortiz                           |
| February 23           | Chandan Setty,<br>University of Illinois                       | <u>"Quasiparticle interference and resonant states in normal and superconducting flat bands"</u>   | Gerardo Ortiz                           |
| <b>March 10-18</b>    | <b>SPRING BREAK</b>  |  |   |
| March 23              | Chen-Lung Hung,<br>Purdue University                           | <u>"Quantum matter built from atom-nanophotonic lattices"</u>  | Phil Richerme                           |
| March 30              | Dusan Sarenac,<br>University of Waterloo                       | <u>"Characterizing materials via structured neutron beams"</u>   | Mike Snow                               |
| April 6               | Philip Phillips,<br>University of Illinois at Urbana-Champaign | <u>"Anomalous Dimensions for Conserved Currents and Extra Dimensions in the Strange Metal?"</u>  | Gerardo Ortiz and Martin Rodriguez-Vega |
| April 13              | Yan Li,<br>University of Utah                                  | <u>"Exciton Spin Coherence in Hybrid Organic-Inorganic Perovskites"</u>  | Shixiong Zhang                          |
| April 20              | Srini Iyengar,<br>IU Chemistry                                 | <u>"Reduced scaling electronic structure and dynamics using lessons from set-theory and geometry networks: post-Hartree-Fock accuracy at DFT cost"</u> | Herb Fertig                             |
| <b>April 30-May 4</b> | <b>FINALS WEEK</b>   |  |   |
| <b>August 20</b>      | <b>FALL SEMESTER COMMENCES</b>                                 |  |   |
| August 29             | Babak Seradjeh,<br>IU Physics                                  | <u>"Floquet Topology: Fast, Slow and Across"</u>   |   |
| September 5           | Taylor Hughes,<br>University of Illinois at Urbana-Champaign   | <u>"Higher Order Topological Phases: Quadrupoles, Meta-materials, and Beyond"</u>  | Babak Seradjeh                          |
| September 12          | Michael Manfra,<br>Purdue University                           | <u>"Towards Topological Qubits in Superconductor/Semiconductor Hybrid System"</u>  | Gerardo Ortiz                           |
| September 19          | Yi Gu,<br>Washington State University                          | <u>"Phase-Defined Van der Waals Metal-Semiconductor Junction"</u>  | Shixiong Zhang                          |
| September 26          | Adrian Del Maestro,<br>University of Vermont                   | <u>"Entanglement area law in superfluid 4He"</u>   | Paul Sokol                              |

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|---------------------------|--|--|----------------|
| October 3                 | Marissa D'Onofrio,<br>IU Physics   | Candidacy Seminar -<br><u>"A Trapped Ion Quantum Simulator<br/>for Two-Dimensional Spin<br/>Systems"</u>   | Phil Richerme  |
| <b>October 4-7</b>        | <b>FALL BREAK</b>  |  |                |
| October 10                | Erik Henriksen,<br>Washington University in St.<br>Louis                             | <u>"Two topics in graphene: infrared<br/>spectroscopy and charge-doping a<br/>Mott insulator"</u>  | Herb Fertig    |
| October 17                | Jinlyu Cao,<br>IU Physics  | <u>"RKKY Interactions in Graphene<br/>Landau Levels"</u>   | Herb Fertig    |
| October 24                | Jeff Ou,<br>IUPUI  | <u>"Beating Quantum Mechanics with<br/>Quantum Mechanics"</u>  | Phil Richerme  |
| October 31                | Thomas H. Heaton,<br>Caltech   | <u>"Implications of Strong-Rate-<br/>Weakening Friction for the Length-<br/>Scale Dependence of the Strength<br/>of the Crust; Why Earthquakes are<br/>so Gentle"</u>    | Dave Baxter    |
| November 7                | Abhishek Kumar,<br>IU Physics  | Candidacy Seminar -<br><u>"Floquet optical conductivity and<br/>higher order Floquet topological<br/>insulators"</u>   | Babak Seradjeh |
| November 14               | Emilio Cobanera,<br>SUNY Polytechnic Institute                                       | <u>"Quantum Brownian Motion in a<br/>Landau Level"</u>   | Gerardo Ortiz  |
| <b>November<br/>17-25</b> | <b>THANKSGIVING BREAK</b>  |  |                |
| November 28               | Yuanheng Xie,<br>IU Physics  | Candidacy Seminar:<br><u>"Building a 2D quantum simulator<br/>with trapped ions"</u>   | Phil Richerme  |
| December 5                | Vladimir Hutanu,<br>University of Aachen and<br>Jülich Centre for Neutron<br>Science | <u>"New single crystal diffractometer<br/>with polarized neutrons POLI at<br/>MLZ as a versatile tool for the<br/>detailed investigation of magnetic<br/>structures"</u> | Mike Snow      |
| <b>December<br/>10-14</b> | <b>FINALS WEEK</b>   |  |                |