Modern Condensed Matter
Nordita course

Course description:

- We will discuss collective behavior, transport theory, band structure, quantum phase transitions, magnetism, superconductivity and superfluidity, correlated materials and machine learning and data informatics applied to electronic materials, topological states. The essential topics will include experimental techniques: neutron scattering, ARPES, optics.

Course information:

- Start Date: Sept 21 2020, 16:00-17:15
- Finals (DATE: Nov 18 2020): essay & presentation
- Grading: Pass-Fail. Credit: 6 hours, upon agreement with the supervisor.
- Prerequisites are QM1, QM2.
- The course is intended for advanced graduate students
- Everybody is welcome to attend.
- Webpage: TQM [https://tqmatter.org/]
- Book: S. Girvin and K. Yang, *Modern Condensed Matter Physics*

Course location:

- Online lectures: through Zoom application: Meeting ID: 652 0894 7966, Password: 338127
- In person lectures/discussions: Albanova, Room FA32, biweekly Wednesdays, 16:00-17:15

Lecturers:

- A. V. Balatsky (Nordita)
- M. Månsson (KTH)
- S. Bonetti (SU)
- J. Weissenrieder (KTH)
- V. Juričić (Nordita)
- M. Geilhufe (Nordita)
- J. Helsvik (Nordita)
- H. Rostami (Nordita)

Contact information:

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Nordita PhD lecture coordinators:

Contact us if you are interested in organizing a future Nordita PhD course.

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Theoretical Quantum Matter

UNIVERSITET STOCKHOLMS

NORDITA

KTH VETENSKAP OCH KONST