

Tentative Schedule

All talks in BEC 109 (except Friday afternoon session)

Monday:

9:00-9:50 Distinguished Lecture 1, Bruno Nachtergaele, Introduction to Quantum Spin Systems
10:05-10:55 Distinguished Lecture 2, Bruno Nachtergaele, Introduction to Quantum Spin Systems
11:10-12:00 Shannon Starr, Tutorial on $SU(2)$ and spin waves
12:00-2pm **Lunch break**
2pm-2:50 Gunter Stolz, Tutorial on self-adjoint operators and solving the Schrödinger equation
3:05-3:55 Daniel Ueltschi, Graphical representations for quantum spin systems
4:10-5:00 Daniel Ueltschi, Graphical representations for quantum spin systems (continued).

Tuesday:

9:00-9:50 Distinguished Lecture 3, Bruno Nachtergaele, Introduction to Quantum Spin Systems
10:05-10:55 Distinguished Lecture 4, Bruno Nachtergaele, Introduction to Quantum Spin Systems
11:10-12:00 Bob Sims, Lieb-Robinson Bounds: A Tutorial
12:00-2pm **Lunch break**
2pm-2:50 Gunter Stolz, XY spin chain and Jordan-Wigner transform
3:05-3:55 Bob Sims, On the Random XY Spin Chain
4:10-5:00 Anna Vershynina, A complete criterion for convex-Gaussian states detection.

Wednesday:

9:00-9:50 Distinguished Lecture 5, Bruno Nachtergaele, Introduction to Quantum Spin Systems
10:05-10:55 Distinguished Lecture 6, Bruno Nachtergaele, Introduction to Quantum Spin Systems
11:10-11:25 Alireza Rafiyi, Mean-field limit in open quantum systems
11:30-11:45 Amanda Young, Spectral Gap of d-dimensional PVBS Models
12:00pm **Excursion to Oak Mountain**

Thursday:

9:00-9:50 Distinguished Lecture 7, Bruno Nachtergaele, Introduction to Quantum Spin Systems
10:05-10:55 Distinguished Lecture 8, Bruno Nachtergaele, Introduction to Quantum Spin Systems
11:10-12:00 Spiros Michalakis, Quasi-adiabatic evolution: A powerful new tool in mathematical physics
12:00-2pm **Lunch break**
2pm-3:15pm Pieter Naaijken, Superselection sectors in quantum spin systems
3:30-4:45 Sven Bachmann, Classifying quantum phases.

Friday:

9:00-9:50 Distinguished Lecture 9, Bruno Nachtergaele, Introduction to Quantum Spin Systems
10:05-10:55 Distinguished Lecture 10, Bruno Nachtergaele, Introduction to Quantum Spin Systems
11:10-12:00 Open questions session. (Bruno Nachtergaele moderator)
12:00pm **Lunch break**
2pm-5pm Short talks and informal discussion. In 458 Campbell Hall.