

# SEMINAR NOTICE

*Department of Physics and Engineering Physics  
University of Saskatchewan*

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**SPEAKER:** Prof. Jonas Fransson, Uppsala University, Sweden

**TOPIC:** *A correlated view of chiral-induced spin selectivity.*

**DATE:** Tuesday September 27th

**TIME:** 3:30-4:30 p.m.

**PLACE:** *Physics 103*

## **Abstract:**

Chiral-induced spin selectivity is an intriguing phenomenon that, to our knowledge, rests on a foundation of structural chirality, spin-orbit interactions, and strongly nonequilibrium conditions. The effect is a measure of the response to changes in the magnetic environment coupled to the active region, and the phenomenology refers back to the experimental observations of substantial changes in the charge current amplitude through chiral molecules upon changes in the external magnetic conditions. Chiral-induced spin selectivity has been shown to not be limited to multistranded helical structures, such as double-stranded DNA molecules and bacteriorhodopsin, but has also been observed in, for example, various types of peptides and polyalanines and, recently, also in helicene.

*This event is part of the quanTA Seminar, the ongoing talk series of the interdisciplinary Centre for Quantum Topology and Its Applications (quanTA).*

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