THE INSTITUTE FOR MOLECULAR ENGINEERING

Seminar Series

SPEAKER

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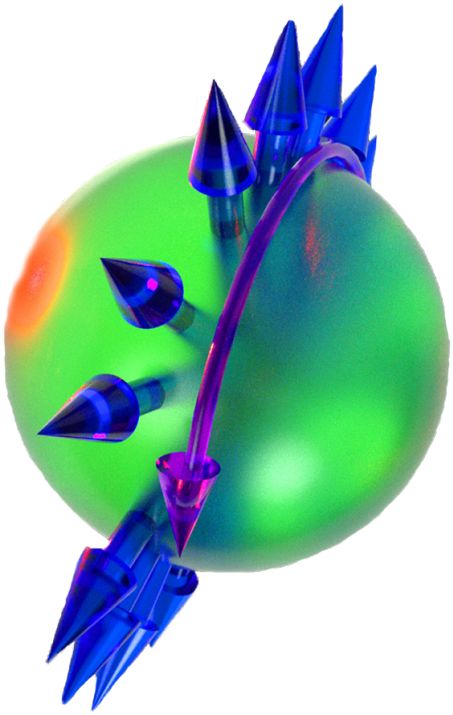
Spin correlations in room-temperature electronic transport, and implications for spin-coherent technologies



New types of room-temperature devices are possible that rely on spin correlations in transport. These spin-spin interactions render the resistance and electroluminescence of nonmagnetic organic materials very sensitive to small external fields, and to fringing fields from nearby magnetic domains. Spin-spin interactions in magnetic insulators also can be controlled with electric fields, yielding room-temperature voltage-controlled phase-shifters for coherent spin wave transport.

Wednesday, April 30th

2 PM GCIS W301

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