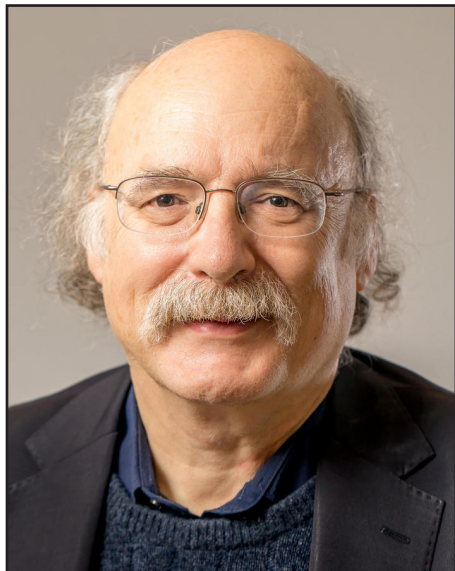


HUBERT JAMES LECTURE AT PURDUE

TOPOLOGICAL QUANTUM MATTER, ENTANGLEMENT, AND THE “SECOND QUANTUM REVOLUTION”

MARCH 6, 2025 | PHYS 112 | 3:30 P.M.



F. DUNCAN M. HALDANE

Professor at Princeton University

There is great renewed activity in exploring unexpected properties of quantum mechanics, driven by the possibility of quantum information processing. Among those surprises are “Topological quantum states” of condensed matter, which in principle can be used to store and process quantum information, “topologically protected” from decoherence due to coupling to the local environment. Recently a working “topological q-bit” has finally been announced, and there have been exciting developments in the study of exotic electronic states in 2D materials that could host such q-bits.

HOST: PROFESSOR MICHAEL MANFRA

The Hubert M. James Lecture Series brings distinguished physicists to Purdue University to highlight fundamental aspects of physics for a broad university audience. The Department of Physics and Astronomy established the Hubert James Lecture in 1990 thanks to the generosity of the James family and in recognition of Prof. James’s outstanding service to Purdue University from 1936 to 1974.

Hubert James Lecture Committee:

*Chris Greene, David Nolte, Martin Kruczenski,
Norbert Neumeister, Yong Chen, David Koltick*



Department of Physics and Astronomy