Mathematisch-Naturwissenschaftliche Fakultät
Wissenschaftliche Einrichtung Physik

HEINRICH HEINE
UNIVERSITÄT DÜSSELDORF

Physikalisches Kolloquium

Donnerstag, 10.01.2019, 16:30 Uhr – Hörsaal 5J

From quantum spin chains to chiral spin liquids

Prof. Dr. Rodrigo Pereira (Federal University of Rio Grande do Norte / Natal, Brazil)

Chiral spin liquids are highly entangled phases of matter in which interacting spins break time reversal and reflection symmetries, but do not develop conventional magnetic order even at zero temperature. They are expected to exhibit exotic properties following from a spectrum of deconfined fractional excitations, and the first signatures of such properties may have just been observed in recent experiments. In this talk I will explain our current theoretical understanding of chiral spin liquids in terms of effective field theories ranging from strongly coupled gauge theories to coupled-chain constructions based on arrays or junctions of quantum spin chains.

Ab 16:00 Uhr Kaffee, Tee und Gebäck im Foyer vor dem Dekanat der Math.-Nat.-Fakultät (Gebäude 25.31. Ebene 00)

Für die Dozenten der Physik
Prof. Dr. R. Egger