Abstract Submitted for the MAR11 Meeting of The American Physical Society

## Magnetic Monopoles in Matter: An Analytic Theory BERNARD

KAAS, University of Twente — Transport theory is presented which, starting from the microscopic field equations, incorporates the magnetic monopole physics occurring in materials such as spin ice. Hall effect, Landau levels, and thermopower are calculated for magnetic charges. Magnetic charge currents in elementary lattices are shown to exist even in the absence of geometrical frustration.

> Bernard Kaas University of Twente

Date submitted: 19 Nov 2010

Electronic form version 1.4