

# PHYSIKALISCHES KOLLOQUIUM

Mittwoch, 07.11.2012, um 17:15 Uhr

Ort: Reichenhainer Str. 90; Neues Hörsaalgebäude, Raum: 2/N013

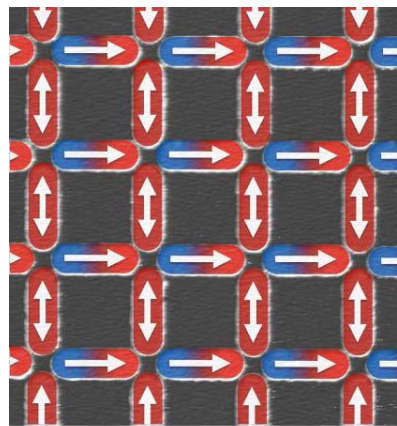


**Prof. Björgvin Hjörvarsson**

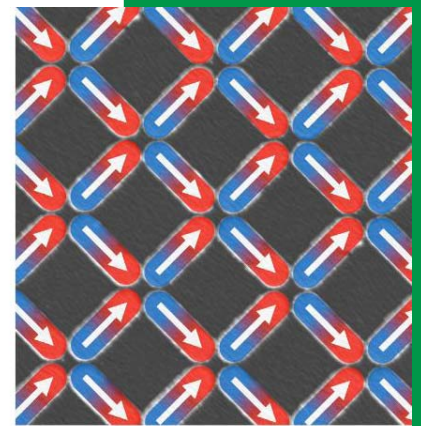
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## **Melting artificial spin ice**

*Artificial spin ice arrays of micromagnetic islands are a means of engineering additional energy scales and frustration into magnetic materials. I will describe how such pattern can be engineered: how the effective spin dimensionality and interactions can be adjusted almost at will.*



→ [10] saturation field



→ [11] saturation field

*The criteria for obtaining thermalization of the magnetic elements (super-spins) will be addressed and I show how this influences the ordering in both Kagome building blocks as well as extended spin ice arrays. Finally, the ordering among and within the magnetic elements will be discussed and the presence of two phase transitions will be demonstrated in artificial spin ice structures*

Alle Zuhörer sind ab 17:00 Uhr zum Kaffee vor dem Hörsaal eingeladen.