## Physikalisches Kolloquium

Universität Konstanz

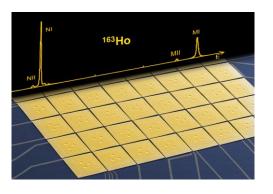


Di 07.05.24 15:15 Uhr R 513 mit anschl. Umtrunk



**Festkolloquium** 

**Prof. Dr. Christian Enss**Kirchhoff-Institute for Physics
University of Heidelberg



## **Exploring and Exploiting the Fascinating World of Low Temperatures**

Superfluidity and superconductivity are unique macroscopic quantum states that require cooling below their transition temperature to emerge. Their fascinating properties have attracted the attention of generations of scientists for more than a century. Still today many open questions remain. They are not only very interesting in their own right, but also enable a growing number of applications ranging from superconducting electronics and cryogenic detectors to quantum technologies in general. Here we will discuss the physics and application of metallic magnetic calorimeters (MMCs), which are among the most advanced cryogenic detectors. Their universal applicability for particles and radiation as well as their high resolving power make them a popular choice for many different experiments. Current applications include X-ray spectroscopy, neutrino physics, dark matter searches, materials analysis, mass spectrometry and nuclear forensics.

Host: Prof. Elke Scheer

Organisation:

**Prof. Clemens Bechinger**