

Großes Physikalisches Kolloquium an der Universität zu Köln



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Electrochemical Energy Storage beyond Lithium

The transition to renewable energy sources is driving significant changes in energy technology and impacting ecosystems worldwide. Mobile energy supply and intermediate energy storage are encountering new challenges that necessitate innovative technologies. Beyond functionality, the sustainability of batteries throughout their entire life cycle must also be considered. This talk will introduce electrochemical energy storage, review established battery concepts, and discuss the strengths and weaknesses of these technologies. Additionally, it will explore the challenges and opportunities of future technologies beyond Li-ion batteries, through the perspective of the Cluster of Excellence "POLIS," with a focus on battery materials, their characterization during operation, and sustainability.

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16³⁰ Uhr
HS III

