



## **Recent and future liquid metal experiments on dynamo action and related magnetohydrodynamic instabilities**

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Starting with the Riga and Karlsruhe liquid sodium experiments, the last decade has seen great progress in the laboratory modeling of dynamo action and related magnetohydrodynamic instabilities such as the magnetorotational instability (MRI) and the Tayler instability (TI). We summarize the recent experimental achievements, and we present our plans for a large scale precession dynamo experiment and a combined MRI/TI experiment in the framework of the DRES-DYN project at Helmholtz-Zentrum Dresden-Rossendorf.