Numerical Simulations of Dynamo Experiments

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Several experimental groups throughout the world have reproduced the dynamo effect on a laboratory scale or are preparing to do so. All experiments rely on numerical simulations, both in the design phase and for data analysis. This talk presents a few examples of how experiments and simulations interact, and where they agree and disagree, in particular for the Karlsruhe experiment. Possible implications for the geodynamo will also be discussed.

View the extended summary