## 9th International Workshop on Numerical Modelling of High Temperature Superconductors - HTS 2024



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## 3-D modelling and experimental results of a sorted bulk staggered array undulator

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This work presents the 3-D modelling and measurements of the sorting of a 10 cm long high-temperature superconducting bulk undulator. We use the H- $\phi$  formulation together with the matrix method to produce an inverse analysis of the trapped field potential of each bulk. The simulation results are then used to sort the bulks in order to reduce the field error. A factor of 1.8 error reduction was measured experimentally.

## Topic

Applications in large instruments such as high-field magnets, medical magnets and accelerator magnets

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