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Stationary dynamos in the VKS experiment

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The VKS experiment has shown many dynamo regimes generated by an unconstrained sodium liquid flow forced by the rotation of coaxial impellers.
We have developed a method for 3D magnetic field reconstruction based on Galerkin transforms.
After tests on synthetic fields and real solenoidal fields, we extract and compare the energy and the magnetic field topology for stationary dynamos observed in different rotations - one disk, contra and anti-contra – of two iron impellers.
We discuss our results by comparing with a dynamo configuration involving one iron and one steal impeller.