

Exact, Feasible and Practical Cloaks for Static and Quasistatic Magnetic Fields

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Abstract

Here we review how cloaks for dc and low-ac magnetic fields have been theoretically proposed and experimentally demonstrated using different approaches. They range from exact cloaks for uniform dc fields to actual cloaks being used in future particle accelerators. We also present how the cloak of static and quasistatic magnetic fields by metamaterials can be realized in very simplified situations, including the case of using only a single homogeneous and isotropic material.

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