

## Virtual MHD Jets on Grids - DTU Orbit (08/11/2017)

### Virtual MHD Jets on Grids

As network performance has outpaced computational power and storage capacity, a new paradigm has evolved to enable the sharing of geographically distributed resources. This paradigm is known as Grid computing and aims to offer access to distributed resource irrespective of their physical location. Many national, European and international projects have been launched during the last years trying to explore the Grid and to change the way we are doing our everyday work. In Ireland, we have started the CosmoGrid project that is a collaborative project aimed to provide high performance super-computing environments. This will help to address complex problems such as magnetohydrodynamic outflows and jets in order to model and numerically simulate them. Indeed, the numerical modeling of plasma jets requires massive computations, due to the wide range of spatial-temporal scales involved. We present here the first jet simulations and their corresponding models that could help to understand results from laboratory experiments.

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