| cases | doc_1 | | doc_2 | | decision | id |
|---|---|---|---|---|---|---|
| | | | authors | • Dimitri Cobb<br>• Francesco Fanelli | DUPLICATES | 967 |
| | authors | • D. Cobb<br>• F. Fanelli | title | Symmetry breaking in ideal magnetohydrodynamics: the role of the velocity | | |
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| | doi | 10.1007/s41808-021-00105-0 | urls | • http://arxiv.org/pdf/2102.13586v1<br>• http://arxiv.org/abs/2102.13586v1<br>• http://arxiv.org/pdf/2102.13586v1 | | |
| | urls | • https://www.semanticscholar.org/paper/178932f4be021ccebd912929e77154e29e2581dc | id | id-43925019468905220 | | |
| | id | id1262168820855765753 | abstract | The ideal magnetohydrodynamic equations are, roughly speaking, a quasi-linear symmetric hyperbolic system of PDEs, but not all the unknowns play the same role in this system. Indeed, in the regime of small magnetic fields, the equations are close to the incompressible Euler equations. In the present paper, we adopt this point of view to study questions linked with the lifespan of strong solutions to the ideal magnetohydrodynamic equations. First of all, we prove a continuation criterion in terms of the velocity field only. Secondly, we refine the explicit lower bound for the lifespan of $2$-D flows found in [11], by relaxing the regularity assumptions on the initial magnetic field. | | |
| | abstract | None | versions | | | |
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