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**hyperbolic tearing path in brittle sheets** BENOIT ROMAN, PMMH (CNRS/ESPCI/UPMC/UDIderot), ALEJANDRO IBARRA, FRANCISCO MELO, Departamento de Fsica, Universidad de Santiago de Chile — Thin sheets are prone to bend out-of-plane when they are torn. Although non-linear plate elasticity is very diffcult to combine with fracture mechanics, experiments show that the fracture trajectory is very robust in brittle thin sheets, with oscillating, converging or spiral geometry. Here we show how simple arguments can be used to explain the fracture trajectory, considering anisotropic properties of the material.

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