

# HII Regions from “Exiled” Massive Stars

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- 15-25% of O stars are not in clusters, and (almost) all of these are “exiles”, moving through the ISM away from their birthplace.
- Their winds and HII regions can have strong dynamical effects on the ISM.
- We study HII regions from these stars with 2D and 3D (magneto)hydrodynamic simulations.
- Kinetic energy input to ISM from HII regions can be comparable to that from winds.
- Ionisation front can be dynamically unstable.
- Modelling can be used to constrain mass-loss rates of O stars.