

# **A computational framework for the semi-Lagrangian treatment of Mean-Field Games on unstructured grids**

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We introduce a unified computational framework for the numerical solution of MFGs on unstructured grids via semi-Lagrangian schemes. The goal is to develop efficient and scalable algorithms for the solution of a wide class of PDEs on complex domains by adapting to this context different tools from computational geometry. In particular, this work covers equations with advective and diffusive terms, continuity equations, nonlinear terms related to optimal control, treatment of Dirichlet and Neumann boundary conditions, and domains with complex topology.