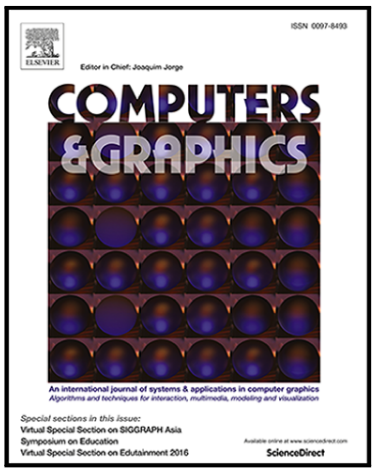

Generalized Drag Force for Particle-based Simulations

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Highlights

- We propose a simple particle-based drag force to compute air-fluid and air-rigid interactions.
- We estimate the drag coefficient and exposed surface area per particle to approximate a drag equation.
- For fluid particles, we approximate their deformation to improve the drag coefficient and surface area estimation.
- We show a comparison to a full multiphase simulation and other scenarios where our proposed force improves plausibility of fluid and rigid behavior.