

Abstract Submitted  
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**Drag and drop simulation: from pictures to full three-dimensional simulations** MICHEL BERGMANN, ANGELO IOLLO, INRIA Bordeaux Sud Ouest, France — We present a suite of methods to achieve “drag and drop” simulation, i.e., to fully automatize the process to perform three-dimensional flow simulations around a bodies defined by actual images of moving objects. The overall approach requires a skeleton graph generation to get level set function from pictures, optimal transportation to get body velocity on the surface and then flow simulation thanks to a cartesian method based on penalization. We illustrate this paradigm simulating the swimming of a mackerel fish.

Michel Bergmann  
INRIA Bordeaux Sud Ouest, France

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