SUSANA GÓMEZ, National University of Mexico, Mexico City Modeling the Optimal Cleaning of Polluting Oil in the Open Sea

In this ongoing work, a model of the movement of oil spots in the open sea and the numerical methods to solve the resulting partial differential equations, implemented on a distributed parallel machine, are presented. The model includes the effect of a Pumping Ship, that aspires the polluting oil.

The ship will follow a global optimal trajectory, that maximizes the amount of pollutant pumped. The global optimization will be carried out using a fast evolutionary algorithm. Numerical results will be presented.