



# LAMARCA-SC

**Lagrangian transport of MARine litter and microplastics from modeling, Analysis and observations in CoAstal waters.**

**Structures of transport and Connectivity patterns**

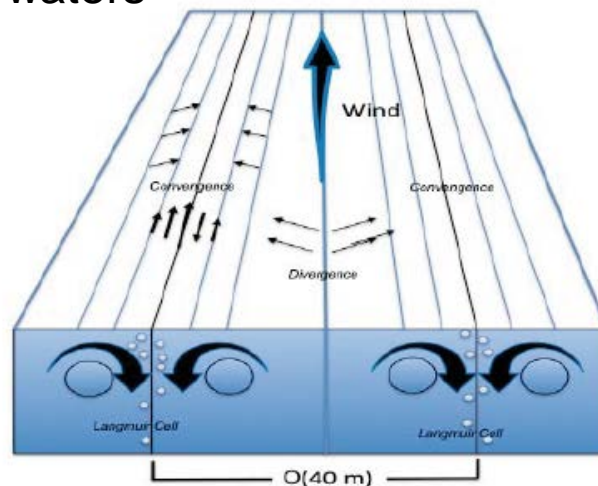
Ministerio de Ciencia e Innovación – Agencia Estatal de Investigación  
2021 Call of “Proyectos de generación de Conocimiento”,  
‘Investigación orientada’  
Thematic subarea: **Marine Science and Technology**  
PID2021-123352OB-C32

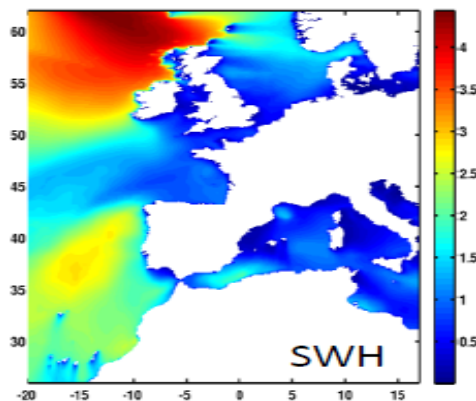
IFISC IPs: **Cristóbal López & Emilio Hernández-García**

Sept 2022 – Sept 2026 (4 years)

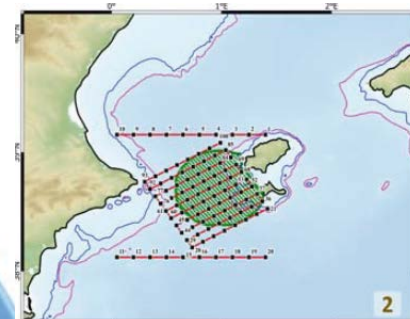
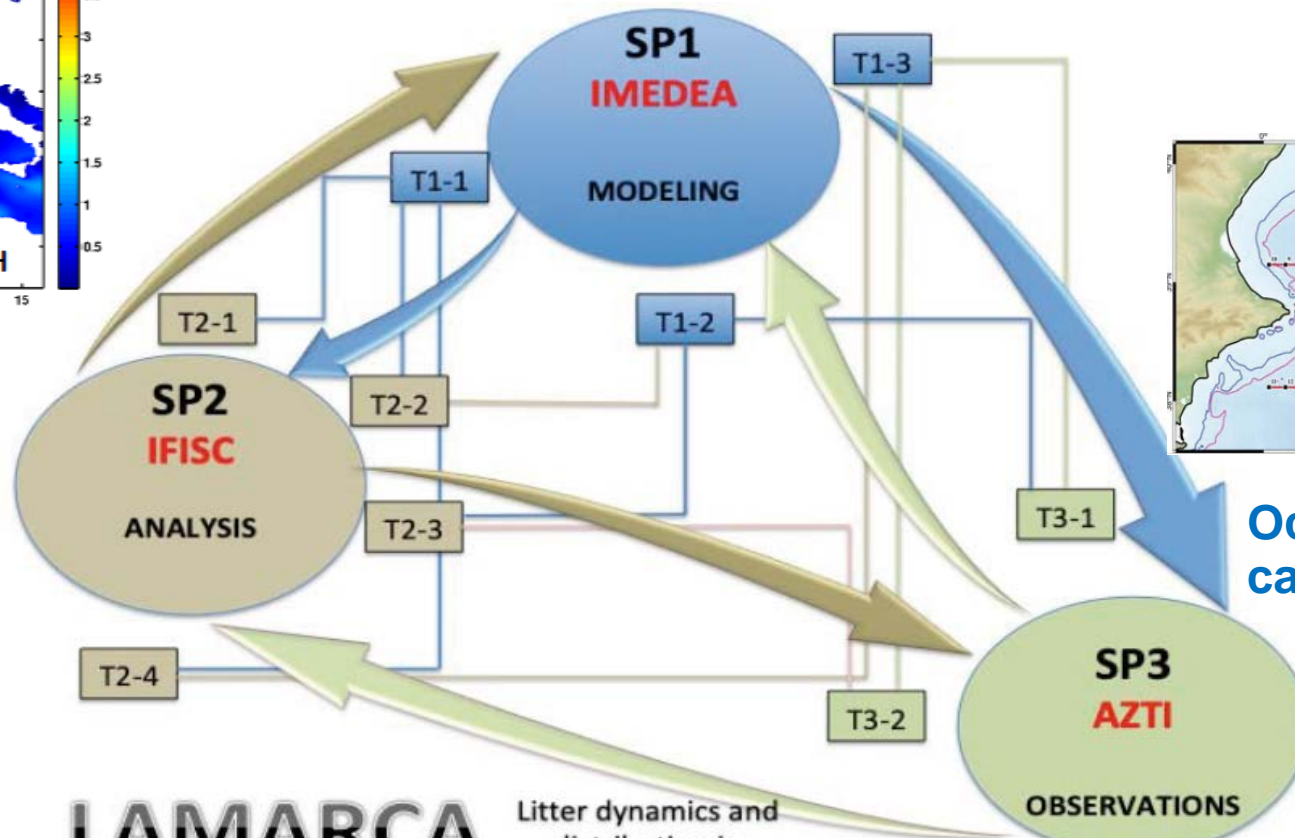
**IFISC – UIB Budget : 85000 € (+ 21 % = 102850 €) + 1 FPI**

The aim of this project is to further understand the role of oceanic transport in **marine litter (microplastics and meso/macrolitter) dispersion and accumulation areas in the sea surface, along the water column and over the seafloor**. With special emphasis on coastal zones and in the range of **scales from 1 m to 10 km, where the vertical motions by marine currents play a relevant role**. Focusing on the distribution of marine litter by ocean currents, we propose an approach that combines **ocean-current structures, oceanographic campaigns, and new Lagrangian tools from complex systems** to characterize marine connectivity and mixing properties in coastal waters





## Computer simulations

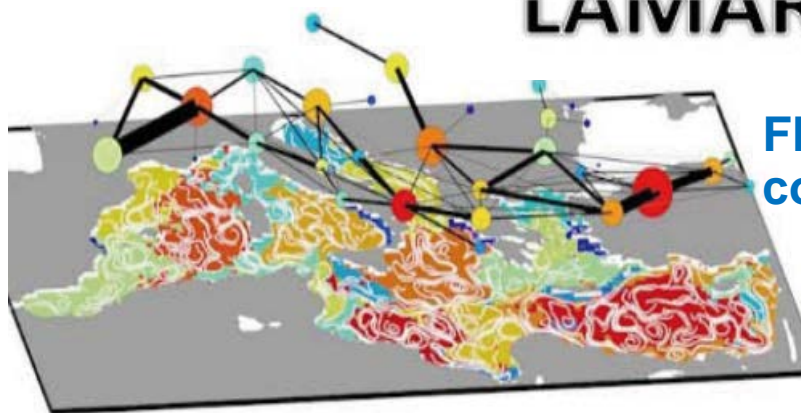


## Oceanographic campaigns

LAMARCA

Litter dynamics and distribution in coastal waters

## Flow networks, coherent structures





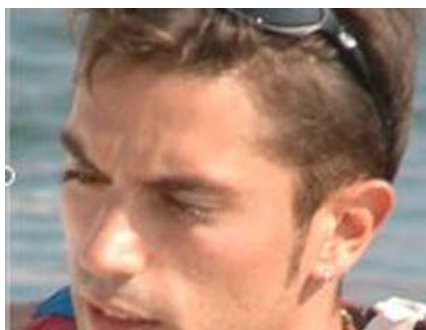
## LAMARCA @ IFISC



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**LAMARCA kick-off meeting**  
 (14-15 dec 2022)