



Shocks, Solitons and Turbulence Unit (Emile Toubert)

# FY2019 Annual Report

**Shocks, Solitons and Turbulence Unit**

**Associate Professor Emile Toubert**

## Abstract

The Shocks, Solitons and Turbulence (S2T) Unit carries theoretical and computational studies of energy transfers and transport arising from shock/solitary waves and turbulence. We work on a variety of problems (from cosmic to biological scales) expressed in terms of (i) fields obeying some form of conservation laws, (ii) closed using physics-based or simple behavioral arguments, (iii) and found in a turbulent and/or shocked regime. Our current activities are articulated around three main themes: complex fluids, active fluids, analogous fluids.

## 1. Staff

- Emile Toubert, Associate Professor
- Stephen Winn, PhD student visiting from Imperial College London
- Saori Chappell, Research Unit Administrator

## 2. Collaborations

Nothing to report.

## 3. Activities and Findings

Nothing to report.

## 4. Publications

Nothing to report.

## 5. Intellectual Property Rights and Other Specific Achievements

Nothing to report.

## 6. Meetings and Events

Nothing to report.

## 7. Other

Nothing to report.