

UK Fluids Network Photo competition #12 - 'Fluids in the natural world'

JOINT 3rd PLACE

'Riverside Rapids'

Declan Clifford, Ewan Armstrong-Miller & Neeraj Sumaria (Southampton)

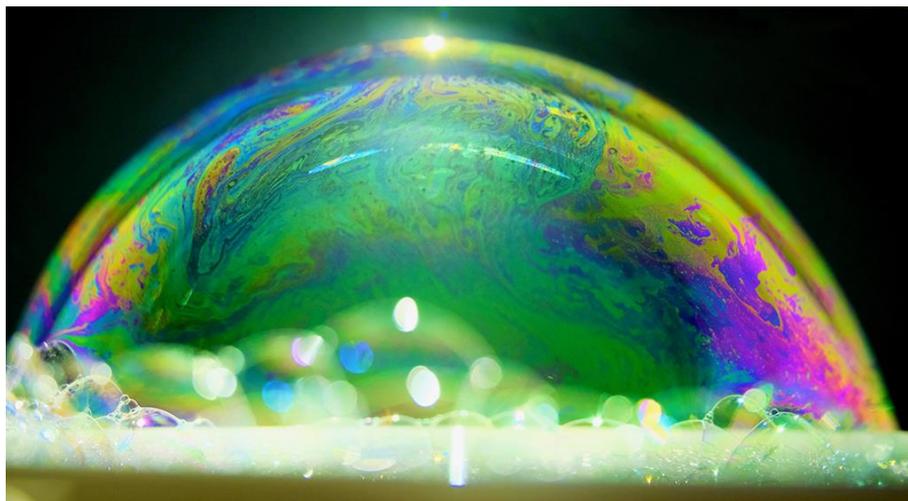


Click on image to see high quality version

Turbulent flow in a river with chaotic waves. The picture was taken at low-tide when the riverbed roughness has more pronounced effects on turbulence production. An instantaneous shot is compared to a long-exposure shot, analogous to the RANS equations where the flow characteristics are averaged over time.

'Turbulence Within a Soap Film Bubble'

Alexander Hine, Thomas Preskett & Tom Griffiths (Southampton)



Click on image to see high quality version

The chaotic patterns in a soap film are an example two-dimensional turbulence. This bubble was created using water and a weak dilution of detergent and sugar. In the thin wall of the bubble, vortex stretching is restricted, enstrophy is conserved, and different inertial range scalings occur than in 3D turbulence.