



Contribution ID: 5

Type: **not specified**

## Danilo Lewanski, "Resurgent Topological Recursion"

*Thursday 21 January 2021 11:45 (25 minutes)*

Topological recursion (TR) arose from random matrix models and was promoted to a mathematical theory in 2007. It can be thought as an implementable algorithm which takes as input an object called spectral curve and produces as output the infinite list of numbers which are solution to some enumerative problem. TR is by now applied to Mirror Symmetry, String Theory, Gromov-Witten theory, Hurwitz theory, WKB analysis, Painleve equations, polynomial invariants of knots, Hitchin systems, and more. We will give some accessible example of how it works and what can generate. If time allows, we'll dive into some conjectural connection with resurgence.

**Session Classification:** Student talks