Guillem Cazassus (U Oxford):
Extending down Donaldson-Floer theory

I will present a program aimed at recasting Donaldson-Floer theory into an extended topological field theory, explain what this means, and how it relates to some important problems such as the Atiyah-Floer conjecture.

I will also compare this to the Moore-Tachikawa field theories, which are structurally similar theories arising in string theory, as well as the Donaldson-Segal program, which addresses a similar question for the Donaldson-Thomas invariants.

This will complement my talk at the symplectic geometry seminar, and provide context and motivation, though it will be self-contained.