Potential PhD project in Mathematics Radboud University

**Supervisor:** Ioan Marcu

**Title project:** The geometry of the Poisson diffeomorphism group

**Description**
In contrast to symplectic geometry, in Poisson geometry very little is known about the groups of Hamiltonian/Poisson diffeomorphisms of Poisson manifolds. This project aims to study these groups, including their natural topologies, their Hofer-type geometry, their smooth or diffeological structure, and to extend the flux homomorphism and the Calabi group to the Poisson setting. The PhD student will learn techniques from symplectic topology and apply these in the setting of Poisson geometry.

**Name/Contact of any collaborator(s):**