

## Symmetric closed Reeb orbits on the sphere

**Leonardo MACARINI**<sup>1</sup>

<sup>1</sup> IST-Lisboa

A long standing conjecture in Hamiltonian Dynamics states that every contact form on the standard contact sphere  $S^{2n+1}$  has at least  $n + 1$  simple periodic Reeb orbits. In this talk, I will consider a refinement of this problem when the contact form has a suitable symmetry and we ask if there are at least  $n + 1$  simple symmetric periodic orbits. We show that there is at least one symmetric periodic orbit for any contact form and at least two symmetric closed orbits whenever the contact form is dynamically convex. This is joint work with Miguel Abreu and Hui Liu.