

## D'ANCONA Pietro

### Equivariant wave maps on a class of rotationally symmetric manifolds

Joint work with Qidi Zhang (Shanghai).

We study a class of rotationally invariant manifolds, which we call admissible, on which it is possible to prove smoothing and Strichartz estimates for the wave equation. This class includes asymptotically flat manifolds but also perturbations of real hyperbolic spaces  $\mathbb{H}^n$  for  $n \geq 3$ , and other manifolds with non vanishing curvature at infinity. Among other results we can prove the global existence of equivariant wave maps from admissible manifolds to general targets, for small initial data of critical regularity  $H^{\frac{n}{2}}$ .