Global well-posedness for the $L^2$-critical NLS in higher dimensions

In this talk we will present a joint work with Daniela De Silva, Gigliola Staffilani and Nikolaos Tzirakis on global well-posedness for the $L^2$ critical NLS in $\mathbb{R}^n$ with $n \geq 3$. Inspired by a recent paper of Fang and Grillakis, we combine the method of almost conservation laws with a local in time Morawetz estimate to improve global well-posedness results in higher dimensions.