

A renaissance for the algebraic topology of manifolds

Ulrike Tillmann¹

¹ Isaac Newton Institute for Mathematical Sciences

Manifolds are a central object of study in mathematics and many of its applications. In the middle of the last century, over a period of several decades our understanding of them blossomed through the work of Thom, Milnor, Kervaire, Sullivan, Wall, Novikov, and many others. But since then progress had been slow. In this talk I will explain how and why recent advances, much led by Galatius and Randal-Williams, have led to an explosion of new work answering questions that have been left open for nearly half a century.