

## Self-conjugate and double-real cobordism

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The self-conjugate cobordism spectrum,  $MSC$ , is the cobordism of manifolds whose stable normal bundles are complex with anti-linear automorphisms. Since the 1960s, the calculation of its coefficients has been open. I will discuss a modified Adams-Novikov spectral sequence that collapses to the coefficients of  $MSC$ , which gives a complete algebraic description of these coefficients. As a part of the calculation, we also describe another spectral sequence for the coefficients of  $MO[2]$ , double-real cobordism. The techniques we use come from the study of structured homotopy theory, formal group laws, as well as the motivic loop theory of Gheorghe, Isaksen, Wang and Xu. (Joint work with I. Kriz, B. Riley and P. Somberg.)

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