1154-55-1271   **Clover May*** (`clovermay@math.ucla.edu`). *Decomposing C_2-equivariant spectra.* Preliminary report.

Computations in $RO(G)$-graded Bredon cohomology can be challenging and are not well understood, even for $G = C_2$, the cyclic group of order two. A recent structure theorem for $RO(C_2)$-graded cohomology with coefficients in the constant Mackey functor $\underline{\mathbb{F}_2}$ substantially simplifies computations. The structure theorem says the cohomology of any finite C_2-CW complex decomposes as a direct sum of two basic pieces: cohomologies of representation spheres and cohomologies of spheres with the antipodal action. This decomposition lifts to a splitting at the spectrum level. In joint work with Dan Dugger and Christy Hazel we extend this result to a classification of compact modules over the Eilenberg-MacLane spectrum $H\underline{\mathbb{F}_2}$. (Received September 14, 2019)

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