## 1172-55-49 Christian Carrick\* (carrick@math.ucla.edu), PO Box 1135, Ripon, CA 95366. Cofreeness in Real bordism theory and the Segal conjecture.

The Segal conjecture for  $C_2$  is a fundamental result in equivariant homotopy theory. We describe its relationship to the genuine equivariant spectra central to the Hill-Hopkins-Ravenel (HHR) solution to the Kervaire invariant problem: the norms of Real bordism theory. We show, in particular, that the Segal conjecture for  $C_2$  is equivalent to the cofreeness of the norms of Real bordism theory. Using the HHR Slice Theorem, we prove these spectra are cofree, giving a proof of the Segal conjecture for  $C_2$  that avoids the homological algebra used in existing proofs. (Received August 12, 2021)