Universal coefficient sequences in chromatic homotopy theory

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Abstract: K-theory with Reality was introduced by Atiyah as a combination of real and complex K-theory. In joint work with John Greenlees, we give a universal coefficient sequence for connective Real K-theory, using Anderson duality.

Connective Real K-theory can be generalized to C_2 -equivariant spectra $BPR\langle n \rangle$. Despite their complexity, these are still computationally accessible. We also compute the Anderson dual of $BPR\langle n \rangle$ and the associated universal coefficient theorem and relate it to local cohomology.