1096-55-1776 **Anna Marie Bohmann*** (bohmann@math.northwestern.edu), Department of Mathematics, 2033 Sheridan Road, Evanston, IL 60208, and **Angelica M. Osorno** (aosorno@reed.edu), Department of Mathematics, 3203 E Woodstock Blvd, Portland, OR 97202. *An equivariant infinite loop space machine.*

An equivariant infinite loop space machine should turn categorical or algebraic data into genuine G-spectra. While infinite loop space machines have been a crucial part of homotopy theory for decades, equivariant versions are in early stages of development. I will describe joint work with A. Osorno in which we build an equivariant infinite loop space machine that starts with diagrams of categories on the Burnside category and produces a genuine G-spectrum via the work of Guillou–May. This machine readily applies to produce Eilenberg–MacLane spectra for Mackey functors and topological K-theory. (Received September 16, 2013)