1154-03-829   **Philipp Schlicht*** (`philipp.schlicht@bristol.ac.uk`), School of Mathematics, University of Bristol, Fry Building, Woodland Road, Bristol, BS81UG, United Kingdom. *Forcing over Cohen's symmetric model.*

Cohen constructed a choiceless symmetric model from a sequence of Cohen reals. In this model, there is an infinite Dedekind-finite set, i.e. no proper subset surjects onto it. We study new forcing phenomena that appear in this setting and use them to answer the following questions:

1. How large can an infinite Dedekind-finite set be in generic extensions?
2. Can an infinite Dedekind-finite set be collapsed by adding a Cohen subset?

By collapsing a set we mean adding a surjection from a subset where none existed previously. This is joint work with Asaf Karagila. (Received September 11, 2019)