Alan Edelman* (mkl@ams.org). Random matrices, numerical computation, and remarkable applications. Preliminary report.

In this talk requiring no special prerequisites, we will introduce the interplay of numerical computation with Random Matrix Theory. Two overarching themes will emerge: 1) computation is not a side show to the mathematics, but rather the math and computation go together and 2) The applications of Random Matrix Theory continue to surprise all of us. (Received September 21, 2012)