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Karl E Liechty* (klichty@umich.edu), University of Michigan, Department of Mathematics,
530 Church St., Ann Arbor, MI 48109. *Extremal statistics for the Airy₂ process minus a parabola.*

The Airy₂ process is a stationary process whose marginal distribution is the Tracy-Widom GUE distribution. It was introduced by Prahofer and Spohn in the context of the discrete polynuclear growth model, but is expected to govern the spatial fluctuations in a wide range of physical systems, namely those in the so-called KPZ universality class. I will discuss some recent and some not-so-recent results for the maximum of the Airy₂ process minus a parabola and the location of this maximum. These statistics appear in the study of a directed polymer in a random medium. (Received September 11, 2012)