Scaling Exponents for Certain 1+1-Dimensional Directed Polymers

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This talk describes three positive temperature polymer models in 1+1 dimensions for which precise fluctuation exponents have been derived recently: the Hopf-Cole solution of the KPZ equation, a lattice polymer with log-gamma distributed weights, and a polymer in a Brownian random environment. These exponents agree with the values known for some time for last passage percolation models which can be viewed as zero temperature polymers. Parts of the work are joint with Marton Balazs, Jeremy Quastel and Benedek Valko.