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**Ivan Corwin** and **Promit Ghosal\*** (pg2475@columbia.edu), 1255 Amsterdam Avenue, SSW - 931, Columbia University, New York, NY 10027, and **Alan Hammond**. *KPZ equation correlations in time.*

We consider the narrow wedge solution to the Kardar-Parisi-Zhang stochastic PDE under the characteristic  $3 : 2 : 1$  scaling of time, space and fluctuations. We study the correlation of fluctuations at two different times. We show that when the times are close to each other, the correlation approaches one at a power-law rate with exponent  $2/3$ , while when the two times are remote from each other, the correlation tends to zero at a power-law rate with exponent  $-1/3$ . We also prove exponential-type tail bounds for differences of the solution at two space-time points. (Received July 08, 2019)