The Airy line ensemble at the rough-smooth boundary

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The two-periodic Aztec diamond is a random tiling model which features three macroscopic regions known as frozen, rough and smooth, which are each characterized by their decay of correlations. At the rough-smooth boundary, we report that the height function converges to an independent sum of the Airy surface and an i.i.d noise field, and that there is a family of (two-dimensional) lattice paths which converges to the Airy line ensemble. This talk is based on joint work with Duncan Dauvergne and Thomas Finn.