Limit shapes in the Schur process

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We explore large random volume-weighted pyramid partitions introduced by Kenyon, Szendroi and Young, as well as large Aztec diamonds with non-uniform measures from the perspective of Schur processes. For each measure we describe the limit shape, and some of its properties. We also discuss fluctuations around the edge. If time permits, we draw attention to some speculative connections between these models and the Gelfand-Tsetlin polygons of Petrov and the Kenyon-Okounkov theory. This is based on joint work with Mirjana Vuletic, Cedric Boutillier and Guillaume Chapuy.