# Scale selection in polygonal fracture patterns

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The striking order of polygonal fracture patterns, such as columnar joints, naturally prompts the question of which processes and parameters the patterns are controlled by. In this presentation, I will focus on columnar joints where the coarsening of the columns have ceased, and investigate the relation between the constant column width and the temperature profile and speed. A scaling function for the relation between the width of the columns and the width of the thermal front is found analytically, and compared to numerical simulations of the system. The match is very good.