

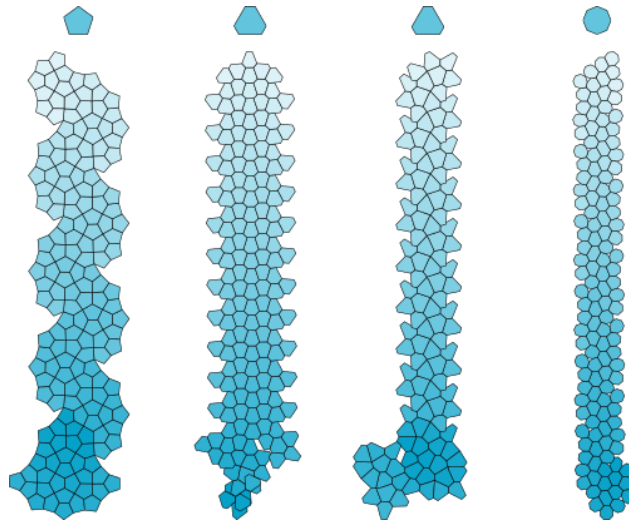
Slimming down through frustration

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In many diseases, proteins aggregate into fibers. Why? One could think of molecular reasons, but here we try something more general. We propose that when particles with complex shapes aggregate, geometrical frustration builds up and fibers generically appear. Such a rule could be very useful in designing artificial self-assembling systems, *e.g.*, out of colloids or DNA origami.



One-dimensional aggregates formed by identical polygonal particles (shown at the top) that cannot fit together to tile the plane unless deformed. After Lenz & Witten, *Nat. Phys.* **13**, 1100 (2017)