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Remodeling of cellular cytoskeleton drives tissue level morphogenesis MADHAV MANI, KITP and UCSB Physics, THOMAS LECUIT, IBDML, BORIS SHRAIMAN, KITP and UCSB Physics — Mechanical stresses are central to morphogenesis, both as a cause that generates geometric and topological change, and as regulatory signals that couple cells. Live imaging of fluorescently tagged tissues gives us insight into the cellular processes underlying tissue dynamics during morphogenesis. Amongst these is the remodeling of the cytoskeleton and cellular adhesion. Here, following observations from *drosophila* germ band extension and ventral furrow formation, we a) investigate the mechanical state of the tissue b) perform a quantitative analysis and verification of the cell and tissue level stresses and c) determine how conserved cellular processes are regulated to generate tissue level stresses that drive morphogenesis.

[X] Prefer Oral Session
[ ] Prefer Poster Session

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