



# 2017 Post-Ostrom Colloquium



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## How do complex crystals (including quasicrystals) grow?

Crystals are materials with long-range order, as determined by their diffraction patterns consisting mainly of sharp spots. The atoms can be in unit cells as part of a periodic lattice, or there might be no lattice: the sharp spots of the diffraction pattern can be incompatible with periodically distributed atoms. Crystals with icosahedral order in diffraction are called icosahedral quasicrystals. Early efforts to understand them focused on tilings, but this has not proved fruitful. And even periodic crystals of alloys can have very large and complex unit cells. How can these grow? For one particular set of quasicrystals, called Tsai-type, a mechanism involving stabilization by entropy is proposed.

**Thursday, April 20th, 2017**

**4:10 pm in Neill 5W**

Reception at 3:30 pm in Neill 216

Hosted by Washington State University Department of Mathematics & Statistics

*The Annual Theodore G. Ostrom brings internationally renowned mathematics scholars to campus each spring. The lectures honor Emeritus Ostrom, who retired from WSU in 1981 after 21 years on faculty.*