## 1023-20-297 **Tadeusz Januszkiewicz\*** (tjan@math.ohio-state.edu). Systolic spaces: Minimal surfaces, Flat Torus Theorem and related results, according to Tomasz Elsner.

Systolic complexes are simplicial analogs of CAT0 spaces. They do exhibit some striking two dimensional features, even though their dimension can be arbitrarily large.

I will present recent results of Tomasz Elsner, a PhD student at Wroclaw University. Starting with examination of minimal surfaces in systolic spaces, he gives a precise version of a Flat Torus Theorem and a systolic variant of Dani Wise's characterization of relative hyperbolicity of two dimensional CAT0 complexes. (Received September 04, 2006)