Topology Seminar

The topology and geometry of some 'special' cube complexes

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Abstract: Are you tired of picking up the pieces when the robots on your factory floor collide? Stumped by the way your protein chains manage to fold themselves up so quickly?? Stymied by how to combine the right chemicals in your tiny electrowetting pharmaceuticals lab??! Look no further, the solution is here: state complexes. They're cubical, they're non-positively curved, and they'll help you keep track of discretely moving objects. They're also subtle, but with a little algebraic topology and discrete CAT(0) geometry we can say a good deal about them. This talk will include some of what we know about state complexes, some of what we'd like to know, reasons for caring in the first place, and a slew of pretty pictures. Graduate students are especially welcome.

Wednesday, October 17, 2007, 4:00 pm
Mathematics and Science Center: W302

Mathematics and Computer Science
Emory University