



# 36<sup>th</sup> Annual Ostrom Lecture



## Dr. Jean Taylor

Rutgers University  
*Professor Emerita of Mathematics and  
Visiting Faculty at Courant Institute of  
Mathematical Sciences*

### Everything you always wanted to know about soap bubbles

The discovery that there was a branch of mathematics that dealt with shapes made Jean Taylor switch from chemistry to mathematics in the middle of graduate school. Following a man around led her fortuitously to Princeton, where two young faculty members were leading the development of the relatively new field of geometric measure theory. In her Ph.D. thesis, Jean proved that surfaces of minimum total area in a particular class consisted only of smooth surfaces meeting in smooth triple junctions. Within six months, she realized that the general proof of Plateau's rules for the shapes of general soap bubble clusters and soap films on frames was within her grasp. Then within another six months, she learned of whole new fields of interesting shapes she could study, arising in the engineering field of materials science. In this talk, she will convey some of the excitement of discovery along with the things she has learned about soap bubbles and their cousins.

**Wednesday, April 19th, 2017  
7:00 pm in Webster 16**

Free and open to the public, reception immediately following 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.*

Post-Ostrom Colloquium Thursday, April 20<sup>th</sup>, 2017 at 4:10 pm, Neill 5W