1125-I1-2065   **Madhuri Bapat*** (`durga1950@hotmail.com`), 1666 S. Cactus Wren Lane, Thatcher, AZ 85552.
Mathematics and Science in Rangolee Art from India. Preliminary report.

Rangolee is an ancient folk art from India. This author has catagorised the rangolee designs into the ones drawn with dots and the ones without dots. Some designs with dots are drawn by connecting the dots and others by drawing a line around the dots. These designs are also catagorised as traditional and contemporary. She has investigated mathematical models and principles in those designs. Four principles that are found in the designs are 1. Euleriun Graphs, 2. Iterations or recursions, 3. Algorithm and 4. Symmetry. Some designs are drawn using Laws of Reflection from physics. Some designs follow cyclic order. Iterations of some designs are drawn more than one way. in her 10 min talk the author will do the case study of selected designs. (Received September 19, 2016)