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Angular Velocity Measurements of Rotating Plasma Rings WILLIAM THEISEN, MATT SIBILA, Ohio Northern University — The rotational motion of a strongly-coupled unmagnetized dusty plasma rings is studied. The particles move in the ring shaped potential that is formed using a variable aperture with a center post. Particle position data is analyzed and the angular velocity of the particles is calculated. The rotation rate of the ring depends on the number of particles, the variability of the inter-particle spacing, and the pressure.

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