Radial band formation in binary mixtures of flowing granular media in a tilted tank\textsuperscript{1} WILLIAM HOURIGAN\textsuperscript{2}, THOMAS WARD\textsuperscript{3}, UCLA — The formation of radial band of glass beads in a variable-sized grain mixture in a tilted rotating tank is examined experimentally for angles between $15^\circ$ and $65^\circ$ from the horizon and for rotation speeds $\leq 50$ RPM. The mixture is composed of glass beads of two sizes; which have diameters between $100 - 600\mu m$. Images are recorded of band formation for differing concentrations. We examine the width of the band and the distance from the bottom surface of the tank as a function of the concentration, tilt angle and speed.

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\textsuperscript{2}Department of Mechanical and Aerospace Engineering \\
\textsuperscript{3}Department of Mathematics