

Figure 5. Abode of the Rotonians. The acceleration due to rotation at the inner wall of the outer perimeter is very nearly the same as the acceleration due to gravity at the surface of Earth. The rotation thus provides very nearly the same dynamical experience as that of Earthbound humans. Having no experience with bodies whose mass/radius ratio is sufficient to make gravity (as Earthians "know" it) readily discernible, Rotonians have nevertheless evolved a highly advanced technological and mathematically savvy society. One of the most common facts of their existence is the utter reliability and absolute meaning of accelerometer readings. Combined with an appreciation of the effect of velocity on the rates of clocks and the role of light-speed as a fundamental limit, observations involving accelerometers, clocks, measuring rods, and light, have provided the basis for the Rotonians' understanding of motion.