

## **Abstract**

When too much material collapses into too small a region, the result is a black hole, and internal space-time singularities are expected, where space-time curvatures appear to diverge to infinity. The mathematics works both ways in time yet the Big-Bang singularity was of a completely different character, and better understood in terms of conformal geometry, leading to a cyclic picture of the universe, now with considerable observational support. The mathematics of this picture leads to intriguing speculations involving different cyclic geometrical ideas.