

## Negative mass configurations in de Sitter space

S. Mbarek and M. B. Paranjape

We consider matter represented by a perfect fluid and we show the existence of configurations which everywhere satisfy the dominant energy condition, the condition of hydrostatic equilibrium and give rise to geometries that asymptotically approach the exact solution of a negative mass Schwarzschild-de Sitter space-time. Such configurations could have arisen in the early universe during the inflationary epoch.