

1145-53-117

**Hemangi M Shah\*** (hemangimshah@hri.res.in), Chhatnag Road, Jhansi, Allahabad, UP  
211019, India, and **Akhil S Ranjan**. *Harmonic manifolds with minimal horospheres*.

For a non-compact harmonic manifold  $M$ , we show that the harmonic spaces having minimal horospheres do admit polynomial volume growth. Further, we show that volume density function of  $M$  has polynomial growth, then,  $M$  is flat. This partially answers a question of Szabo namely, which density functions determine the metric of a harmonic manifold. (Received August 03, 2018)