The BMS-conjecture about L^p-positivity preserving manifolds

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In 2002 Braverman, Milatovic and Shubin conjectured that complete riemannian manifolds are L^2-positivity preserving, i.e. if $(-\Delta + 1)u \geq 0$ in the distributional sense and $u \in L^2(M)$ then $u \geq 0$ almost everywhere. Last year the conjecture was proven by Pigola and Veronelli for functions in L^p with $p \in (1, \infty)$. We talk about their proof and how to use their ideas for the graphs case.