Rigidity of Bach-flat Schouten solitons

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\mathbf{Resumo}

In this talk we are concerned with the classification of complete *n*-dimensional Schouten solitons [4], $n \geq 3$. These are the self-similar solutions of an intrinsic flow, called Shouten flow [2, 3].

Assuming that the Ricci tensor of these manifolds have at most two eigenvalues at each point, we are able to show that they are rigid [1]. This allows the classification of complete Bach-flat Schouten solitons. In dimension 3 we are actually able to classify complete Schouten solitons whose Bach tensor is divergence free. As a corollary, we obtain the classification of complete locally conformally flat Schouten solitons for $n \geq 3$.

Referências

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