Collapsing of ALH^*-Gravitational Instantons

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Abstract

In 1977, S. Hawking defined the gravitational instantons which can be regarded as the scaling limit of Calabi-Yau 2-ford. The ALH^*-gravitational-instanton is one of them with exotic volume growth $r^{\frac{4}{3}}$. In this talk, we will study the pointed Gromov-Hausdorff limit of ALH^*-gravitational instantons. This will prove the conjecture of Kontsevich-Sobelman. This is a joint work with Yu-Shen Lin.