

## Suita conjecture and the Ohsawa–Takegoshi extension theorem

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Suita conjecture (1972) asked for the optimal lower bound for the Bergman kernel in terms of logarithmic capacity for domains on the plane. As observed by Ohsawa in the 90's, it is closely related to the  $L^2$ -extension problem for holomorphic functions of several variables. It was eventually proved using techniques of the  $\bar{\partial}$ -equation and Hörmander's  $L^2$ -estimate. We will present some generalizations of the Suita conjecture in higher dimensions. One of interesting aspects is a relation to the Mahler conjecture and the Bourgain-Milman inequality in convex analysis, mostly thanks to a recent complex analytic proof of the latter by Nazarov.