

# **Ikeda's conjecture on the Petersson inner product of the Ikeda lifting**

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Let  $n$  and  $k$  be positive even integers satisfying that  $k > n + 1$ . Then we could consider the so-called Ikeda lifting of elliptic cusp forms of weight  $2k - n$  to Siegel cusp forms of degree  $n$  and weight  $k$ , which is a generalization of the Saito-Kurokawa lifting. Professor T. Ikeda gave a conjecture on the Petersson inner product of the lifting. In this talk, I would like to explain our strategy for proving this conjecture and to report recent progresses, in particular, in the case  $n = 4$ .

**Presented by Kawamura Hisaaki**