On the Bergman kernel and the Kobayashi pseudodistance in convex domains

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The talk is based on a joint work with Wlodzimierz Zwonek

Session: 5. Complex Analysis

It turns out that for convex domains the Bergman kernel on the diagonal is very close to the reciprocal of the volume of the Kobayashi indicatrix. We will discuss estimates and examples confirming this. In particular, we will present formulas for some complex ellipsoids where both the Bergman kernel and especially the Kobayashi pseudometric are hard to compute.