Poly-Bergman spaces on domains Möbius equivalent to a disk

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Let U be a complex domain Möbius equivalent to a disk and let j be in $\mathbb{Z}_{\pm}$. The talk will focusses on explicit representation of the poly-Bergman projection $B_{U,j}$ in terms of the singular integral operators $S_{U,j}$. One also show how the Lebesgue space $L2(U, \mathrm{d}A)$ decompose on the true poly-Bergman spaces. The poly-Bergman kernels of U are explicitly calculated.