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Corona, operators and complex geometry

In my talks I will discuss the operator corona problem (left invertibility of the operator-valued functions) and its relations with the geometry of Hermitian holomorphic vector bundles. Among the topics I am going to consider are:

- “Perturbation” corona problem.
- Analytic projections, curvature, and operator corona problem.
- Codimension one conjecture and a counterexample to the Sz.-Nagy problem.
- Operator corona problem in the case of finite codimension.
- Curvature and the similarity to the backward shift.