



Michal JASICZAK (mjk@amu.edu.pl), Faculty of Mathematics and Computer Science, Adam Mickiewicz University, 60-769 Poznan, Poland, *On the continuity of the Bergman projection in the unit ball and the locally convex extension of H^∞ .*

ABSTRACT. The Bergman projection in the unit ball does not map the space L^∞ into H^∞ . We define locally convex spaces LW and HW consisting of measurable and holomorphic functions respectively, with topology given by weighted - sup seminorms. It is proved that the Bergman projection is a continuous map from LW onto HW . The spaces are the smallest among spaces having these properties. Some locally convex and algebraical properties of these extensions are also investigated.