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Jens Gerlach Christensen* (jchristensen@colgate.edu), Karlheinz Gröchenig (karlheinz.groechenig@univie.ac.at) and Gestur Ólafsson (olafsson@math.lsu.edu). Representation theoretic approach to atomic decompositions of Bergman spaces on the unit ball. Preliminary report.

We will present a representation theoretic approach to atomic decompositions of Bergman spaces on the unit ball. The representations in question are the discrete series representations of SU(n,1), and sampling results on reproducing kernel Banach function spaces on this group provide atomic decompositions. This is joint work with Karlheinz Gröchenig and Gestur Ólafsson. (Received January 21, 2014)