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Gestur Olafsson* (olafsson@math.lsu.edu), Department of Mathematics, Louisiana State University, Baton Rouge, LA 70803, and **Jens Christensen** and **Azita Mayeli**. *Sampling in spaces of bandlimited functions on commutative spaces.*

Let G be a Lie group and K a compact subgroup. The space $X = G/K$ is *commutative* if the Banach algebra $L^1(X)^K$, of K -invariant integrable function on X , is commutative. We give an overview of basic harmonic analysis on those spaces. We introduce the notation of bandlimited functions and then give a sampling theorem for those spaces. (Received January 15, 2011)