Sigurdur Helgason* (helgason@mit.edu). *Eisenstein Integrals and C functions.*

In Harish-Chandra’s work on semisimple $G$ his $c$-function expressed the density of the Plancherel formula for the spherical transform on $G$. Two individual factors in the formula for $c$ express analytic results for the symmetric space $G/K$ and the horocycle space $G/MN$. Each irreducible representation of $K$ gives rise to an Eisenstein Integral and accompanying $C$ functions. Here we describe some results and conjectures for these $C$ and relate these to work of L. Cohn. (Received September 15, 2016)