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Anders Södergren* (andesod@chalmers.se) and **Andreas Strömbergsson**. *A generalization of Rogers' mean value formula and applications*. Preliminary report.

In this talk I will discuss Rogers' mean value formula in the space of unimodular lattices as well as a recent generalization of Rogers' formula. In particular, I will describe a formula for mean values of products of Siegel transforms with arguments taken from both a lattice and its dual lattice. The main application is a result on the joint distribution of the vector lengths in a random lattice and its dual lattice in the limit as the dimension of the lattices tends to infinity. (Received February 14, 2021)