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**Bent Ørsted\***, orsted@imf.au.dk. *Homomorphisms between Verma modules and small representations*. Preliminary report.

For a semisimple Lie group and a minimal parabolic subgroup we study certain systems of partial differential equations on the corresponding nilradical. When the system corresponds to a homomorphism between Verma modules, the solution space may be related to representations of the semisimple group. We shall give examples where one obtains small unitary representations in such a way. This is based on joint work with T. Kubo. (Received September 14, 2016)