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Jose A. Franco (jose.franco@unf.edu) and **Markus Hunziker***
(markus_hunziker@baylor.edu). *The Tricomi equation and complementary series representations of $SL(2, \mathbb{R})$.* Preliminary report.

The Lie algebra of infinitesimal symmetries of the Tricomi equation $\eta u_{\xi\xi} + u_{\eta\eta} = 0$ is isomorphic to $\mathfrak{sl}(2, \mathbb{R})$ plus an infinite-dimensional piece reflecting the fact that the equation is linear. A priori, the action of $\mathfrak{sl}(2, \mathbb{R})$ on solutions does not globalize to an action of the group $SL(2, \mathbb{R})$. However, by restricting the space of solutions to a certain distinguished subspace, we show that we do indeed obtain a globalization and that the resulting representation is a complementary series representation of $SL(2, \mathbb{R})$. (Received September 19, 2016)