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Vera Serganova* (serganov@math.berkeley.edu), Department of Mathematics, UC Berkeley, Berkeley, CA 94720, and **Ivan Penkov**. *On a certain version of category O for direct limit Lie algebras*. Preliminary report.

We will define an analogue of Bernstein-Gelfand-Gelfand category O for infinite-dimensional Lie algebras of infinite rank, for example $\mathfrak{sl}(\infty)$ and discuss analogue of Kazhdan-Lusztig theory in this case. (Received July 18, 2017)