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S. Twareque Ali* (twareque.ali@concordia.ca), Department of Mathematics and Statistics, Concordia University, Montreal, Quebec H3G 1M8, Canada. *An interesting connection between complex orthogonal polynomials and nonlinear coherent states.*

A general construction for bivariate complex orthogonal polynomials has recently been proposed by Ismail, et al. In this talk we point out an interesting connection between such polynomials and the so-called nonlinear coherent states of physics, in particular quantum optics. We show that, under some restrictions, the existence of one implies that of the other and vice versa. (Received September 14, 2015)