1126-33-181   **Robert Milson*** (`rmilson@dal.ca`), Department of Mathematics & Statistics, Dalhousie University, Halifax, Nova Scota B3H3J5, Canada, and **David Gomez-Ullate** (`david.gomez-ullate@icmat.es`) and **Maria-Angeles Garcia-Ferrero** (`mag.ferrero@icmat.es`). *Towards the classification of Exceptional Orthogonal Polynomials.*

Exceptional Orthogonal Polynomials are orthogonal polynomial families that arise as solutions for second-order eigenvalue problems. They generalize the classical families of Hermite, Laguerre, and Jacobi because they allow for polynomial sequences with a finite number of missing degrees. The fundamental technique for constructing such objects is the Darboux transformation, which "dresses" a classical operators to obtain orthogonal polynomials with a finite number of exceptional degrees. We will present a foundational theorem in this subject that asserts that all exceptional orthogonal polynomials arise in precisely this fashion. This result is an essential component of the ongoing classification programme for XOP. (Received January 12, 2017)