1116-33-1083   **Vincent X. Genest*** (`vxgenest@mit.edu`), **Luc Vinet** and **Alexei Zhedanov**. *The non-symmetric Wilson polynomials are the Bannai-Ito polynomials.*

In this talk, I will explain that the non-symmetric Wilson polynomials coincide with the Bannai–Ito polynomials. I will show explicitly the isomorphism between the degenerate double affine Hecke algebra of type $(C_1^\vee, C_1)$ associated to the non-symmetric Wilson polynomials and the Bannai-Ito algebra. The Bannai-Ito polynomials will be seen to satisfy an orthogonality relation with respect to a positive-definite, continuous measure on the real line and a non-compact form of the Bannai-Ito algebra will be presented. (Received September 16, 2015)