1033-41-228 Xin Li*, Department of Mathematics, University of Central Florida, Orlando, FL 32816. Degree of Approximating Splines and an Identity on Stirling Numbers of the Second Kind.

We establish an identity on the Stirling numbers of the second kind through the study of the degree of the polynomial approximation of splines. This proof of a combinatorial identity through analysis may be a springboard for a general method of proof. (Received September 11, 2007)