1078-11-290   **Federico Pellarin*** (`federico.pellarin@univ-st-etienne.fr`), 23, rue du Dr. Michelon, 42023 Saint-Etienne, France. *On the values at one of certain L-series.*

The values of Riemann's zeta function at even positive integers as well as at negative integers first computed by Euler, with the double appearance of Bernoulli numbers and the occurrence of the number π, suggest the structure of the functional equation of this function. In the arithmetic of function fields of positive characteristic there is a variant of Riemann's zeta function and a large spectrum of phenomena similar to Euler's first observations. In spite of this, no analogue of the functional equation of Riemann's zeta is available. In this talk we provide some new evidences that such functional equations should exist and some idea of the shape that gamma factors should have. (Received December 12, 2011)