1035-05-1120Dino Lorenzini* (lorenzin@uga.edu), Department of Mathematics, University of Georgia,
Athens, GA 30602. Two-variable Riemann-Roch zeta-functions of graphs.

The Riemann-Roch theorem of Baker and Norine is a statement pertaining the Laplacian matrix of a graph. It will be used to define a new zeta function attached to the graph. Some of its properties will be discussed, and possible generalized 'Riemann-Roch theorems' for other types of integer matrices will be mentionned. (Received September 18, 2007)