

1154-01-1936      **Kim Plofker\*** ([kim\\_plofker@alumni.brown.edu](mailto:kim_plofker@alumni.brown.edu)), Department of Mathematics, Union College,  
807 Union Street, Schenectady, NY 12308. *Al-Bīrūnī and the mathematics of medieval Indian  
poetry*. Preliminary report.

The combinatorial results of Classical Sanskrit poetic metrics have been traced from ancient texts containing early evidence of zero through some remarkable developments including binary computation and “Pascal’s triangle”. This talk will explore this subject through its Arabic presentation by the 11th-century Muslim scientist al-Bīrūnī in his treatise on India, and seek to shed light on some of its sources. (Received September 16, 2019)