## 1023-01-244

Homer S. White\* (hwhite0@georgetowncollege.edu), Department of Mathematics, Georgetown College, 400 East College Street, Georgetown, KY 40324. An Exploration of Indian Upapatti (Proof) in Nilakantha Somayājin. Preliminary report.

It is now quite widely understood that the mathematicians of classical India were concerned not merely with the enunciation of computational procedures, but also with demonstrating and understanding them properly. Neverthless there is much to be learned about how their views of what constitutes a proof (*upapatti* or *yukti*), and of the role of proof in mathematical practice, varied over time and from one author to another. We will conduct an initial exploration of these questions through a close reading of several proof-discussions in the commentarial treatise  $\bar{A}ryabhatiyabhasya$  of Nilakantha Somayājin, a leading mathematician of the 15th-16th Century Keralese School. (Received August 29, 2006)