1014-01-136 John F. Bukowski* (bukowski@juniata.edu), Department of Mathematics, Juniata College, 1700 Moore Street, Huntingdon, PA 16652. Christiaan Huygens and the Problem of the Hanging Chain. Preliminary report.

In the early seventeenth century, it was thought that a hanging chain took the form of a parabola. In a series of letters with the French monk Marin Mersenne, the 17-year-old Christiaan Huygens showed that the chain did not in fact hang as a parabola. We will discuss some of Huygens's geometrical arguments in detail, as well as the century-long history of the problem. (Received August 01, 2005)