

1135-01-1271      **Jim Hoste\*** (jhoste@pitzer.edu), Pitzer College, 1050 N Mills Ave, Claremont, CA 91711, and  
**Jozef Przytycki.** *Charles Newton Little: America's first knot theorist.* Preliminary report.

The modern theory of knots, a subfield of topology, arose in the latter half of the 1800s after Lord Kelvin proposed that atoms were “knotted vortices in the ether.” This led the Scottish physicist Peter Guthrie Tait to begin tabulating knots, a laborious task in which he was later joined by C.N. Little and Thomas P. Kirkman. Over a period of about 40 years, the three men created a list of all alternating knots with 11 or less crossings and all non-alternating knots to 10 crossings. While they could be sure that their tables listed, in theory, all possibilities, they had no proof whatsoever that their tables did not contain duplications. This would have to wait until well into the 20th century with the development of algebraic topology. In this talk I will review the early history of knot theory with a focus on the life and work of C.N. Little. (Received September 20, 2017)