Meeting: 1004, Bowling Green, Kentucky, AMS CP 1, Session for Contributed Papers

1004-11-123 Andy D Martin* (admartin@ms.uky.edu), University of Kentucky, Department of Mathematics,
719 Patterson Office Tower, Lexington, KY 40506-0027. A Upper Bound for Brun's Constant. Preliminary report.

Viggo Brun proved in 1919 that the series of reciprocals of twin prime numbers converges, say to B. However, no estimate for B was given. Explicit computation by Nicely and others shows B > 1.829 (http://www.trnicely.net/counts.html). In "Prime Numbers: A Computational Perspective" (Crandall and Pomerance, Springer-Verlag 2001) the number 2.15 is stated without proof as being an upper bound. E-mail correspondence with one of the authors has led me to believe that this upper bound has not been established. I will provide an upper bound at my talk. (Received January 21, 2005)