1067-11-331 Renate Scheidler* (rscheidl@ucalgary.ca), Department of Mathematics & Statistics, University of Calgary, 2500 University Drive NW, Calgary, AB T2N1Z4, and Kell H. F. Cheng, Richard K. Guy and Hugh C. Williams. Classification and Symmetries of a Family of Continued Fractions With Bounded Period Length.

It is well-known that the continued fraction expansion of a quadratic irrational is symmetric about its centre; we refer to this symmetry as horizontal. However, an additional vertical symmetry is exhibited by the continued fraction expansions arising from a certain one-parameter family of positive integers known as Schinzel sleepers. This talk provides a method for generating any Schinzel sleeper and investigates their period lengths as well as both their horizontal and vertical symmetries. (Received August 23, 2010)