Year of the succesfully proven old conjectures . . .

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Abstract. Two of my favorite conjectures in algebraic number theory seem to have been proven recently: Biro has proven the Yokoi and Chowla conjectures finding all the real quadratic fields of class number one in which the corresponding continued fraction has period length one. I intend to explain the (elementary) proof and point out some fascinating new functions that arise.

A new manuscript purports to contain the proof of a different, but even more famous question of elementary algebraic number theory (and I have heard from a reliable source that it is correct). If I can confirm this by the time of the conference, and get permission from the author, I will attempt to sketch the main ideas.