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Bena Tshishiku* (tshishikub@gmail.com) and **Genevieve Walsh**. *Relatively hyperbolic groups with boundary a 2-sphere.*

Bestvina-Mess showed that the duality properties of a group G are encoded in any boundary that gives a Z -set compactification of G ; for example, a hyperbolic group with Gromov boundary an n -sphere is a $PD(n + 1)$ group. For relatively hyperbolic pairs (G, P) , the natural boundary – the Bowditch boundary – does not give a Z -set compactification of G . Nevertheless we show that if the Bowditch boundary of (G, P) is a 2-sphere, then (G, P) is a $PD(3)$ pair. This is joint work with Genevieve Walsh. (Received January 09, 2018)