

The cover of the December AMS Notices.

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**Abstract:** The cover of the December 2016 AMS Notices shows an eye-like region picked out by blue and red dots and surrounded by green rays. The picture, drawn by Yasushi Yamashita, illustrates Gaven Martins search for the smallest volume hyperbolic orbifold. It represents a family of two generator groups of isometries of hyperbolic 3-space which was recently studied, for quite different reasons, by myself, Yamashita and Ser Peow Tan.

After explaining the coloured dots and their role in Martins search, we concentrate on the green rays. These are Keen-Series pleating rays which are used to locate spaces of discrete groups. We also introduce some rather mysterious ‘fake pleating rays which partially fill the space of non-discrete groups and relate to a condition of Bowditch, mentioned but not explained in the Notices.