

Meeting: 1003, Atlanta, Georgia, SS 16A, AMS Special Session on Inverse Spectral Geometry, I

1003-58-932 **Peter Buser*** (peter.buser@epfl.ch), Swiss Federal Institute of Technology, Department of Mathematics, SB-IGAT-Station 8, CH-1015 Lausanne, Switzerland, and **Nicole Flach, Colin Maclachlan, Gerhard Rosenberger** and **Klaus-Dieter B. Semmler**. *Spectral subtleties of Fuchsian groups with elements of order two and three.*

In 1978, Marie-France Vignéras constructed isospectral pairs of Riemann surfaces using Fuchsian groups that arise from certain maximal orders in quaternion algebras. Her method works as well for Fuchsian groups with elliptic elements—except for a strange exception when the group has simultaneously elements of order two and three. (Received October 01, 2004)