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Pictorial representation of solutions of PS-3 integral equation

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Abstract

Eigenvalue problem for Poincaré–Steklov-3 integral equation is reduced to the solution of three transcendental equations for three unknown numbers, moduli of pants. The complete list of antisymmetric eigenfunctions of integral equation in terms of Kleinian membranes is given.

MSC2000: 30Fxx, 14H15, 30C20, 45C05, 33E30.

Key words: *Spectral parameter, Riemann surface, pair of pants, branched complex projective structure, Dessin d’Enfants.*