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Algebraic equations of genus 2 Riemann surfaces with a hyperelliptic uniform dessin.

The determination of an algebraic model for the surface uniformized by a given Fuchsian group can be explicitly achieved only in very special situations. In the literature, most of the cases for which this problem has been solved correspond to quasilatonic surfaces (i.e. surfaces with a regular dessin d'enfant).

We find equations for some (non-quasilatonic) surfaces containing a hyperelliptic uniform dessin. The (elementary but sometimes lengthy) calculations leading to them are adapted to each particular case, and are based on the study of the corresponding uniform Belyĭ function. (Received August 28, 2009)