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Ahmed Sebbar* (sebbar@chapman.edu), 363 N. Center Street, Orange, CA 92866, **Daniele Struppa** (struppa@chapman.edu), One University Drive, Orange, CA 92866, **Mihaela Vajiac** (mbvajiac@chapman.edu), One University Drive, Orange, CA 92866, and **Adrian Vajiac** (avajiac@chapman.edu), One University Drive, Orange, CA 92866. *Bicomplex algebra and the fields $\mathbb{Q}(i)$, $\mathbb{Q}(i, \sqrt{2})$.*

We give the right meaning of the result that the zeta function of the bicomplex algebra is the square of the Dedekind zeta function of $\mathbb{Q}(i)$. This allows us to connect bicomplex algebra to the spectral theory of the three dimensional hyperbolic space and to the quadratic extension $\mathbb{Q}(i, \sqrt{2})$ of $\mathbb{Q}(i)$. (Received May 09, 2018)