

# Rankin-Cohen brackets on quasimodular forms

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**Abstract.** We give the algebra of quasimodular forms a collection of Rankin-Cohen operators. These operators extend those defined by Cohen on modular forms and, as for modular forms, the first of them provides a Lie structure on quasimodular forms. They also satisfy a “Leibniz rule” for the usual derivation. Rankin-Cohen operators are useful for proving arithmetical identities. In particular, we explain why Chazy equation has the exact shape it has.

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