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Michael Eastwood* (meastwoo@member.ams.org). *Bernstein-Gelfand-Gelfand Complexes.*

The equations of elasticity are closely related to the equations of Riemannian geometry in three dimensions. These equations enjoy extra symmetries leading to a BGG (Bernstein-Gelfand-Gelfand) complex in the linearised theory. I shall explain how this works and sketch the scope of the BGG machinery (since perhaps there are other applications unknown to the speaker (who works in pure differential geometry)). The talk will concentrate on examples (and suppress the representation theory that lurks in the background). (Received September 15, 2012)