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Jennie D'Ambroise* (jdambroise@hotmail.com), Dept of Mathematics and Statistics, Lederle Graduate Research Tower, Umass Campus, Amherst, MA 01003. An uncoupled EMP formulation of a Bianchi I scalar field cosmology.

Various authors such as J. Lidsey, T. Christodoulakis, T. Grammenos, C. Helias, P. Kevrekidis, G. Papadopoulos and F. Williams are known to have formulated equivalent versions of the 3+1-dimensional Einstein's field equations in terms of a so-called generalized Ermakov-Milne-Pinney (EMP) differential equation. This reformulation provides an alternate method for acquiring exact solutions to the field equations, and has been accomplished within the frameworks of FRLW and some Bianchi universe models. In the case of the particular conformally Bianchi I model in question here, the EMP has been shown by F. Williams to be coupled to a second equation. The author will present an uncoupled version of this cosmological model, as well as its relation to a linear Schrodinger equation. (Received August 24, 2008)