

**Using Katsurada's determination of the Eisenstein series to compute Siegel eigenforms in degree three.**

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We compute 2-Euler factors for Siegel modular forms of level one and degree three in weights less than 22. This is a natural continuation of the work of Miyawaki, who computed weights 12 and 14, and we report on the status of his lifting conjectures. These computations are possible by virtue of Katsurada's work on the  $F_p$  polynomials. Examples of congruence primes in the sense of Katsurada are also given.