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**maki iwami\*** ([pseudoinitial@gmail.com](mailto:pseudoinitial@gmail.com)), Osaka University of Economics and Law, 6-10 Gakuonji, Yao, Osaka 5818511, Japan. *Applying expansion techniques of multivariate expansion base method and extended Hensel construction to cryptography*. Preliminary report.

Multivariate expansion base method is used for multivariate analytic factorization, i.e. factorization over the ring of formal power series fixing the expansion point, and extended Hensel construction is the Hensel construction at a singular point. I'll talk about possibilities for applying their expansion techniques to cryptography using multivariate polynomials. (Received September 16, 2008)