Rankin-Cohen brackets on Jacobi forms and Siegel modular forms and Certain Dirichlet series

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W. Kohnen (1991) constructed cusp forms whose Fourier coefficients are given by special values of certain Dirichlet series of Rankin-Selberg type by computing adjoint map of the product map by a fixed cusp form with respect to the Petersson scalar product. The work of Kohnen has been generalized to the case of Jacobi forms by Sakata (1998), to the case Siegel modular forms by M. H. Lee (1996). Recently, the work of Kohnen has been generalized by S. D. Herrero (2014), where he constructed cusp forms by computing the adjoint map of the map constructed using Rankin-Cohen bracket by a fixed cusp form instead of the product. In this talk, we describe how one can generalize the work S. D. Herrero to the case of Jacobi forms [JS1]and Siegel modular forms [JS2]. This is joint work with Abhash Kumar Jha.

[JS1] Abhash Kumar Jha and Brundaban Sahu, Rankin-Cohen brackets on Jacobi Forms and the adjoint of some linear maps, The Ramanujan Journal, 39 (2016), 3 , 533-544

[JS2] Abhash Kumar Jha and Brundaban Sahu, Rankin-Cohen brackets on Siegel modular forms and Special values of Certain Dirichlet series, To appear in The Ramanujan Journal