

# Special relations between multizeta values and parity results

José Alejandro Lara Rodríguez

*Departamento de Control Automático, Centro de Investigación y de Estudios Avanzados del IPN, Av. Instituto Politécnico Nacional 2508, San Pedro Zacatenco, 07360, México, D.F.*

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*Facultad de Matemáticas de la Universidad Autónoma de Yucatán Anillo Periférico Norte, Tablaje Cat. 13615, Colonia Chuburná Hidalgo Inn, Mérida Yucatán, México  
e-mail: lrodri@uady.mx; jlara@ctrl.cinvestav.mx*

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**Abstract.** We study relations between multizeta values for function fields introduced by Thakur in [25,24]. The  $\mathbb{F}_p$ -span of Thakur's multizeta values is an algebra [26]. In particular, the product  $\zeta(a)\zeta(b)$  is a linear combination of multizeta values. In this paper, several of the conjectures formulated in [16,25] for small values or for special families of  $a$  about how to write  $\zeta(a)\zeta(b)$  as an  $\mathbb{F}_p$ -linear combination of multizeta values, are proved. Also, the parity conjecture formulated in [25] is proved.