

FIXED POINTS AND FUSION RINGS

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We use ‘fixed point factorisation’ to find closed formulas for NIM-reps (a NIM-rep is a non-negative integer matrix representation of a fusion ring) of WZW models. Fixed point factorisation is a simplification of CFT data involving primary fields fixed by simple-currents [1]. Our NIM-rep formulas allow us to calculate D-brane charges and charge-groups in string theory. We also address a connection with the twining characters of Fuchs-Schellekens-Schweigert. This is joint work with Terry Gannon and Mark Walton.

Keywords: WZW models, fixed points, fusion rings, NIM-reps, D-branes

- [1] Beltaos, E., *Fixed points and fusion rings. Part 1*, J. High Energy Phys. JHEP01(2012)154.