

Fourier–Mukai and Nahm
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Nahm transform and Riemann surfaces

Marcos B. Jardim

Departamento de Matemática

IMECC-UNICAMP

Caixa Postal 6065

Campinas, São Paulo 13083-859

BRAZIL

`jardim@ime.unicamp.br`

Abstract

I will outline two new versions of the Nahm transform which generalize, in different directions, the Nahm transform for doubly-periodic instantons. First, I will discuss the Nahm transform of Higgs bundles on a Riemann surface of genus at least two. The second case is the Nahm transform of instantons over the product of a Riemann surface of genus at least two with a complex line. Finally, I will explain how these two constructions are related.