

ATELIER « SYSTÈMES DÉSORDONNÉS : VERRES DE SPIN »
8–13 JUIN 2009

WORKSHOP “DISORDERED SYSTEMS: SPIN GLASSES”
JUNE 8–13, 2009

New identities in spin glasses

PIERLUIGI CONTUCCI

Dipartimento di Matematica
Universita di Bologna
Piazza di Porta S. Donato, 5
I-40126 Bologna
ITALY

contucci@dm.unibo.it

The seminar introduces a new interpolation method in spin glasses which extends to the entire circle the standard interpolation technique. It is shown how to derive new spin glass overlap identities as a consequence of a bound on the variance for the difference between observables in two spin glass systems with some interactions “flipped”. As a side result the triviality of the non-interacting random field is deduced.