

Horacio Castillo: Publications

- “Spatially heterogeneous ages in glassy dynamics”. Horacio E. Castillo, Claudio Chamon, Leticia F. Cugliandolo, Jose Luis Iguain, and Malcolm P. Kennett, *Phys. Rev. B*, **68** 134442 (2003) (cond-mat/0112272).
- “Separation of time-scales and reparametrization invariance for aging systems”. Claudio Chamon, Malcolm P. Kennett, Horacio E. Castillo, and Leticia F. Cugliandolo, *Phys. Rev. Lett.* **89**, 217201 (2002) (cond-mat/0109150).
- “Heterogeneous aging in spin glasses”. Horacio E. Castillo, Claudio Chamon, Leticia F. Cugliandolo, and Malcolm P. Kennett, *Phys. Rev. Lett.* **88**, 237201 (2002) (cond-mat/0112272).
- “Freezing of dynamical exponents in low dimensional random media”. Horacio E. Castillo and Pierre Le Doussal, *Phys. Rev. Lett.* **86**, 4859 (2001) (cond-mat/0006373).
- “Extensive eigenvalues in spin-spin correlations: a tool for counting pure states in Ising spin glasses”. Jairo Sinova, Geoff Canright, Horacio E. Castillo, Allan H. MacDonald, *Phys. Rev. B* **63**, 104427 (2001) (cond-mat/0010302).
- “Semi-microscopic theory of elasticity near the vulcanization transition”. Horacio E. Castillo and Paul M. Goldbart, *Phys. Rev. E* **62**, 8159 (2000) (cond-mat/9909054).
- “Amorphous solid state: A locally stable thermodynamic phase of randomly constrained systems”. Horacio E. Castillo, Paul M. Goldbart, and Annette Zippelius, *Phys. Rev. B* **60**, 14702 (1999) (cond-mat/9905326).
- “Elasticity near the vulcanization transition”. Horacio E. Castillo and Paul M. Goldbart, *Phys. Rev. E* **58**, R24-R27 (1998) (cond-mat/9712050).
- “Universality and its Origins at the Amorphous Solidification Transition”. Weiqun Peng, Horacio E. Castillo, Paul M. Goldbart, and Annette Zippelius, *Phys. Rev. B* **57**, 839 (1998) (cond-mat/9709250).
- “Exact calculation of multifractal exponents of the critical wave function of Dirac fermions in a random magnetic field”. Horacio E. Castillo, Claudio de C. Chamon, Eduardo Fradkin, Paul M. Goldbart, and Christopher Mudry, *Phys. Rev. B* **56**, 10668 (1997) (cond-mat/9706084).
- “Randomly crosslinked macromolecular systems: vulcanization transition to and properties of the amorphous solid state”. Paul M. Goldbart, Horacio E. Castillo, and Annette Zippelius, *Adv. Phys.* **45**, 393 (1996) (cond-mat/9604062).
- “Distribution of localisation lengths in randomly crosslinked macromolecular networks”. H. E. Castillo, P. M. Goldbart, and A. Zippelius, *Europhys. Lett.* **28**, 519 (1994).
- “Ground-state and excitation spectra of the negative-U Hubbard model”. H. E. Castillo and C. A. Balseiro, *Phys. Rev. B* **45**, 10549 (1992).
- “Collective excitations in superconductors: from Bardeen-Cooper-Schrieffer theory to Bose condensation”. J. O. Sofo, C. A. Balseiro, and H. E. Castillo, *Phys. Rev. B* **45**, 9860 (1992).
- “Hall conductivity and Fermi surface in highly correlated systems”. H. E. Castillo and C. A. Balseiro, *Phys. Rev. Lett.* **68**, 121 (1992).
- “Three-band charge fluctuation model for electron pairing: a many-body calculation”. H. Castillo, C. Balseiro, B. Alascio, and H. Ceva, *Phys. Rev. B* **40**, 224 (1989).
- “On the interplay between particle-hole and Δ -hole phonons”. H. Castillo and F. Krmpotic, *Nucl. Phys. A* **A469**, 637 (1987).