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Specific heat of bosons among periodical layers¹ MIGUEL A. SOLíS, Instituto de Física, UNAM, Apartado Postal 20-364, 01000 México, D.F., MEXICO, MARCELA GRETHER, Facultad de Ciencias, UNAM, Apartado Postal 70-542, 04510 México, D.F., MEXICO — It is well known that the specific heat of a 3D ideal boson gas shows continuity as a function of the temperature. However, interactionless bosons among periodic plane layers with variable penetrability, show a specific heat jump at the critical temperature, which increases as a function of the layer impenetrability. The jump resembles that of a conventional superconductor instead of that of a laminar cuprate. We expect that inclusion of inter-boson interaction leads to a more realistic specific heat.

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