

THE NEUTRON
REFRACTION INDEX OF CONFINED
LIQUIDS IN THE CRITICAL REGION

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S u m m a r y

The problem of both density profile and neutron refraction index is studied for a non-uniform liquid in a reduced geometry. A special attention is paid to the influence of gravitation on the properties of liquid systems. New theoretical results are obtained for the shifts of the critical temperature on the phase coexistence curve and the positions of inflection points on the critical isotherm in confined liquids.