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Stability of the orthorhombic $Fddd$ phase in diblocks using Landau theory of weak crystallization AMIT RANJAN, DAVID MORSE, Department of Chemical Engineering and Materials Science, University of Minnesota — Recent numerical SCFT caculations by Tyler and Morse [*Phys. Rev. Lett.*, **94**, 208302, 2005] predict a stable orthorhombic network phase with space group $Fddd$ in weakly segregatd diblocks. In this work, we examine the stability of the $Fddd$ phase using Landau theory. Our analysis and results suggest that $Fddd$ structure with a special unit cell is expected to be a stable phase not only in weakly segregated diblocks but in any other weakly ordered material.

Amit Ranjan
Department of Chemical Engineering and Materials Science
University of Minnesota

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