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Painlevé Nonstandard Truncation Expansion Solutions of Dynamics Equation of Diblock Copolymer

QIAN Xian-Min, 1,2 ZHU Yue-Jin, 3 and HUANG Fu-Bin¹

Abstract: Through Pickering's and extended Painlevé nonstandard truncated expansion method, this paper solves the phase-separating dynamics equation of diblock copolymer, and obtains various exact solutions. We discuss non-complex special solutions which can be made up of hyperbolic functions or elliptic functions.

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Key words: Painlevé nonstandard truncated expansion, phase separation, diblock copolymer, hyperbolic function, elliptic function

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¹ Physics Department, Shanghai Jiao Tong University, Shanghai 200030, China

² Physics Department, Shaoxing College of Arts and Sciences, Shaoxing 312000, China

³ Physics Department, Ningbo University, Ningbo 315211, China (Received: 2004-7-2; Revised:)