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Order-order transition among lamellae, *Fddd*, and gyroid in diblock copolymer melts MIKIHITO TAKENAKA, MYUNG IM KIM, TSUTOMU WAKADA, SATOSHI AKASAKA, SHOTARO NISHITSUJI, KENJI SAIJO, HIROKAZU HASEGAWA, Kyoto University, KAZUKI ITO, Riken, KYOTO TEAM, RIKEN TEAM — We firstly found a Disorder-Gyroid-*Fddd*-Lamellae transition behavior found poly(styrene-*b*-isoprene) (S-I) diblock copolymer melts in previous study. In this study, we will present the dynamics of order-order transition (OOT) among lamellae, *Fddd*, and gyroid. we investigated the dynamics of OOT by using time-resolved small angle X-ray scattering with Synchrotron radiation X-ray source. We found that *Fddd* structure was formed as a metastable structure during the OOT from lamellae to gyroid induced by temperature jump.

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