DIFFERENTIAL DYNAMIC MICROSCOPY OF FLUID MICROSTRUCTURES IN EUTECTIC SYSTEMS

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The Differential Dynamic Microscopy (DDM) is a novel light microscopy technique to gain dynamic information of mesoscopic systems via real space imaging. DDM excels if the probed system is spatially inhomogeneous. Microscopy allows sampling a specified location in the system and thus to compare the different dynamics observable at different locations within a heterogeneous microstructure via DDM. The dynamics of various microstructures in quenched binary mixtures have been analysed. We observed much smaller dynamic changes of such structures over time compared to the variation between different microstructures.