

THE MELTING OF COMMENSURATE PHASES
AND NEW UNIVERSALITY CLASSES

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The melting of two-dimensional commensurate phases of striped ($p \times 1$), and of hexagonal structure, such as the $\sqrt{3} \times \sqrt{3}$ phase of Kr on graphite, will be discussed. An analysis of heterodomain fluctuations, classes of domain walls and their behavior, of modulated structure in the disordered phase, and of the properties of related models, such as the chiral Potts or asymmetric clock models, suggests the existence of new universality classes of commensurate melting transitions beyond those previously identified (Ising, Potts, etc.).

LANDSCAPE IN SHUGAKUIN DISTRICT
-IN THE AFTERNOON AND IN THE EVENING-



Under the gentle sunshine of autumn, an old farmer is working in the field. She is devoting herself to cultivating the soil, in order to give a birth to the new life of plant in this natural world!



In the deepening twilight, a young man is sitting on the field in silence, overlooking the downtown. What is he meditating on, in this calm and inspiring circumstance?