

Figure 1.10 Patterned ground in Svalbard, Norwegian Arctic. Nearly circular areas of fine-grained soil, 2-3 m across, are surrounded by gravel ridges about 0.2m high. These patterns are created by seasonal freeze/thaw cycles in which the fine-grained soils move in a convection-like manner. More than 4×10^4 years ago this area was a wave cut platform covered by a 1-2 m thick layer of coarse, mixed beach sediments. This figure was provided by B. Hallet.

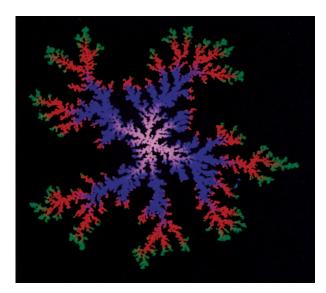


Figure 3.7 This color figure illustrates the way in which a 2-dimensional DLA cluster was constructed by the addition of successive particles. The continuous color scale ranging from white through blue to red and finally to green indicates the order in which the particles were added to the cluster.

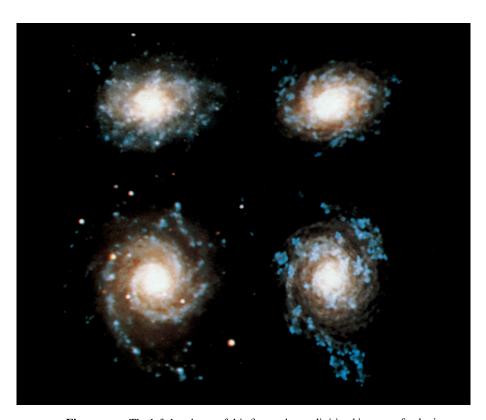


Figure 3.23 The left-hand part of this figure shows digitized images of galaxies NGC-7793 (top) and NGC-628 (bottom), while the right-hand side shows patterns generated by the directed percolation galaxy model of Seiden and Schulman. This figure was provided by P. E. Seiden.



Figure 4.12 Branched patterns formed by the invasion of relatively warm water through holes in "black ice" into a layer of overlying slush. After this event, the slush froze to form "white ice", and the melted regions formed black ice dendrites within the white ice layer. This figure was provided by C. A. Knight.

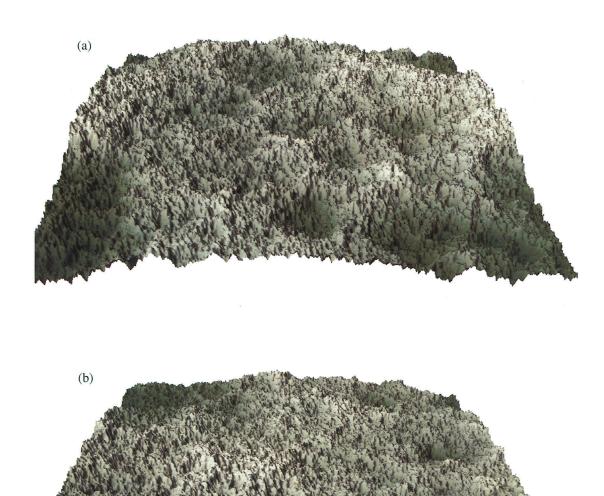


Figure 5.7 Rough surfaces generated by the 2+1-dimensional single-step, solid-on-solid model. Part (a) shows the surface after a mean height < h > of 5000 lattice units has been reached, and part (b) shows the surface at < h > = 10 000, in the same simulation. The simulations were carried out with $L_x = L_y = 1024$, but the surfaces were reduced to 512×512 points for display purposes. This figure was provided by T. Johnsen.