



Figure 1: A schematic diagram of a 1D chain of N sites. The chain is represented by a horizontal line with N sites labeled 1 to N . Sites 1, 2, and 3 are occupied by particles (black dots). Sites 4, 5, and 6 are empty. Sites 7, 8, and 9 are occupied by particles. Sites 10, 11, and 12 are empty. Sites 13, 14, and 15 are occupied by particles. Sites 16, 17, and 18 are empty. Sites 19, 20, and 21 are occupied by particles. Sites 22, 23, and 24 are empty. Sites 25, 26, and 27 are occupied by particles. Sites 28, 29, and 30 are empty. Sites 31, 32, and 33 are occupied by particles. Sites 34, 35, and 36 are empty. Sites 37, 38, and 39 are occupied by particles. Sites 40, 41, and 42 are empty. Sites 43, 44, and 45 are occupied by particles. Sites 46, 47, and 48 are empty. Sites 49, 50, and 51 are occupied by particles. Sites 52, 53, and 54 are empty. Sites 55, 56, and 57 are occupied by particles. Sites 58, 59, and 60 are empty. Sites 61, 62, and 63 are occupied by particles. Sites 64, 65, and 66 are empty. Sites 67, 68, and 69 are occupied by particles. Sites 70, 71, and 72 are empty. Sites 73, 74, and 75 are occupied by particles. Sites 76, 77, and 78 are empty. Sites 79, 80, and 81 are occupied by particles. Sites 82, 83, and 84 are empty. Sites 85, 86, and 87 are occupied by particles. Sites 88, 89, and 90 are empty. Sites 91, 92, and 93 are occupied by particles. Sites 94, 95, and 96 are empty. Sites 97, 98, and 99 are occupied by particles. Site 100 is empty.

