

Fig. 2. A given shape as an initial condition of the system. (a) shows a distribution of u shaped solid cube with u = 1.0. (b) represents a sliced image of (a).

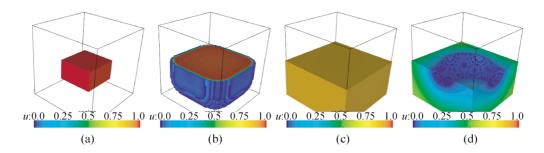


Fig. 3. Wave propagation in a three-dimensional FitzHugh–Nagumo model. The lower half of distributions of *u* at the 0th step (a), 100th step (b), 500th step (c), and 940th step (d) are shown. The parameters are  $D_u = 4.0 \times 10^{-2}$ ,  $D_v = 1.6 \times 10^{-1}$ , a = 0.1,  $b = 1.0 \times 10^{-4}$ ,  $\Delta x = 0.01$ , and  $\Delta t = 1.0 \times 10^{-4}$ .

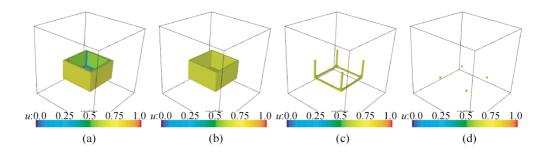


Fig. 4. A time series of the edge point structure observed in a discrete system with  $D_u = 4.0 \times 10^{-5}$  and  $D_v = 1.6 \times 10^{-4}$ . The lower half of distributions of *u* at the 1600th step (a), 1700th step (b), 1900th step (c), and 5000th step (d) are visualized. The other parameters are a = 0.1, b = 1.0,  $\epsilon = 1.0 \times 10^{-4}$ ,  $\Delta x = 0.01$ , and  $\Delta t = 1.0 \times 10^{-4}$ .

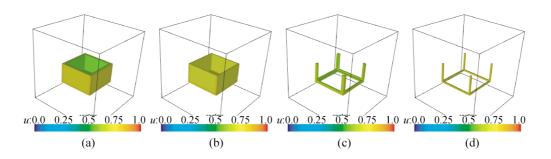


Fig. 5. A time series of the edge line structure observed in a discrete system with  $D_u = 5.0 \times 10^{-5}$  and  $D_v = 2.0 \times 10^{-4}$ . The lower half of distributions of *u* at the 1600th step (a), 1700th step (b), 1900th step (c), and 5000th step (d) are visualized. The other parameters are a = 0.1, b = 1.0,  $\epsilon = 1.0 \times 10^{-4}$ ,  $\Delta x = 0.01$ , and  $\Delta t = 1.0 \times 10^{-4}$ .