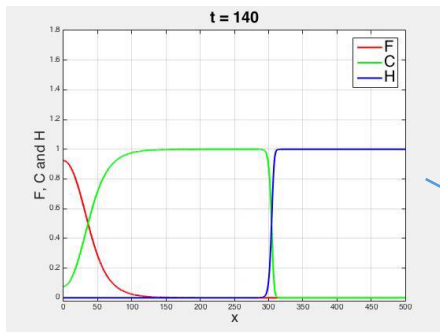# Spreading velocity of (F, C, H)

$$F_t = F_{xx} + a(1 - (F+C))F$$
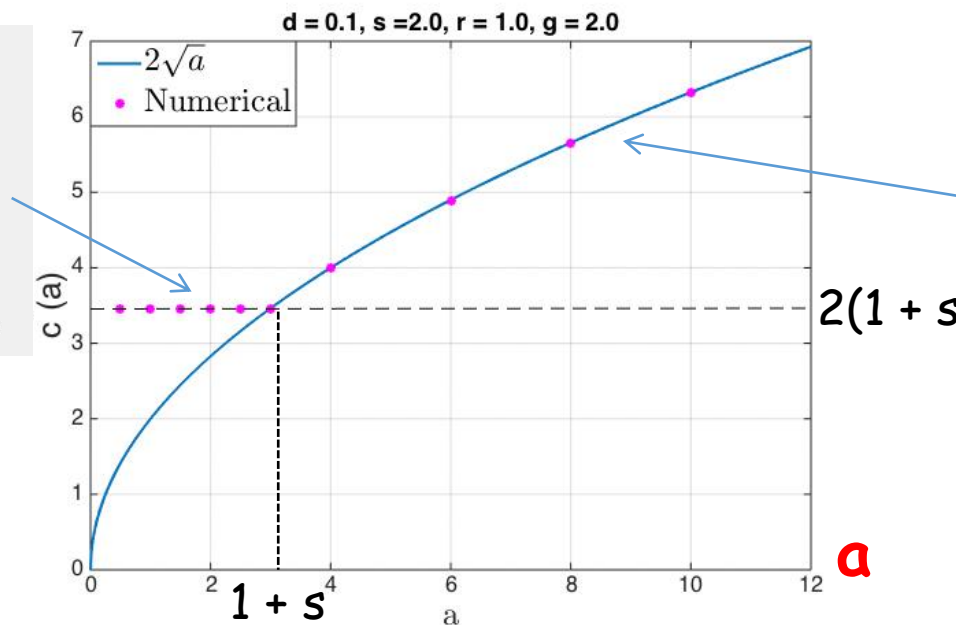
$$C_t = C_{xx} + (1 - (F+C))C + s(F+C)H$$

$$H_t = dH_{xx} + r(1 - H))H - g(F+C)H$$

When **a > 1 + s**, the leading edge-velocity of spreading wave is $2(a)^{1/2}$, while when **a < 1 + s**, the velocity is $2(1 + s)^{1/2}$.

(0,C,H) TW

cultural diffusion

(F,C,H) TW

demic diffusion

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