MD Slides

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H1 header

H2 header

H3 header

H4 header

H5 header

H6 header

Layout
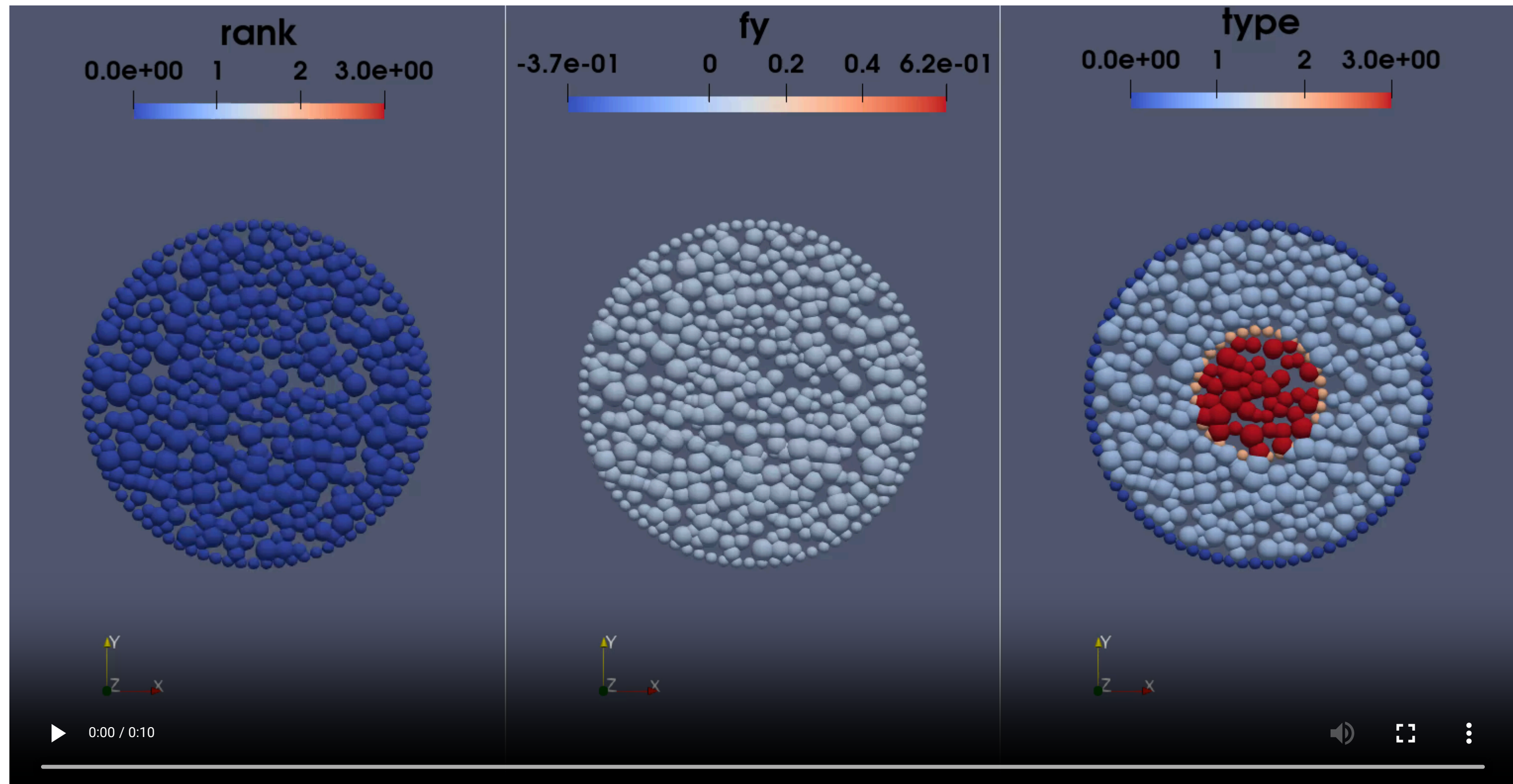
Columns

- Point 1
- Point 2
- d

Some picture

Show movie

my cell simulation

Syntax

Math blocks

$$\dot{x} = \sigma(y - x)$$
$$\dot{y} = \rho x - y - xz$$
$$\dot{z} = -\beta z + xy$$

Code blocks

```r
1  #| fig-height: 8
2  #| fig-align: center
3  #| fig-cap: A random walk with noise
4  library(ggplot2)
5  theme_set(theme_classic(base_size = 25))
6  library(latex2exp)
7  library(patchwork)
8  set.seed(42)
9  Y0 <- 10
10 wt <- rnorm(100, sd = 1)
11 vt <- rnorm(100, sd = 3)
12 dat <- data.frame(
13   t = 1:100,
14   Y = Y0 + cumsum(wt) + vt,
15   vt = vt,
16   wt = wt
17 )
18 p1 <- dat |>
19     ggplot(aes(t, Y)) +
```

Citation

Here is a reference paper (Gardiner et al. 2015), and another (Liedekerke et al. 2010)

Reference

Gardiner, Bruce S., Kelvin K. L. Wong, Grand R. Joldes, Addison J. Rich, Chin Wee Tan, Antony W. Burgess, and David W. Smith. 2015. "Discrete Element Framework for Modelling Extracellular Matrix, Deformable Cells and Subcellular Components." *PLOS Computational Biology* 11 (October). https://doi.org/10.1371/journal.pcbi.1004544.

Liedekerke, P. Van, E. Tijskens, H. Ramon, P. Ghysels, G. Samaey, and D. Roose. 2010. "Particle-Based Model to Simulate the Micromechanics of Biological Cells." *Physical Review E* 81 (June). https://doi.org/10.1103/physreve.81.061906.