

Robot
Pose

Landmark 1

Landmark N

Particle 1

$$X_t$$

$$\mu_1 \Sigma_1$$

• • •

$$\mu_N \Sigma_N$$

Particle 2

$$X_t$$

$$\mu_1 \Sigma_1$$

• • •

$$\mu_N \Sigma_N$$

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Particle M

$$X_t$$

$$\mu_1 \Sigma_1$$

• • •

$$\mu_N \Sigma_N$$