

# PV227 GPU programming

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# Particle systems

- fixed particles,
- iterative particles.



# Fixed particles

- render the particle as a point,
- update their position based on time,
- optionally texture the point.

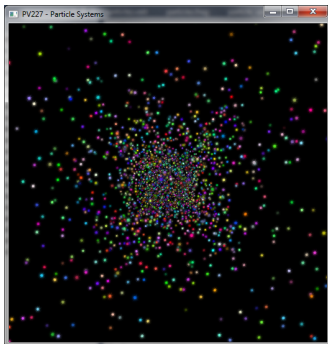


Figure: Particles representing stars in  $t = 0$ .

# Iterative particles

- render particles as points,
- update their position based on previous position.

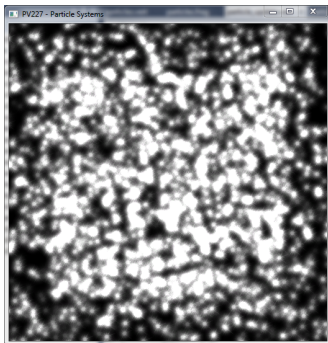


Figure: Emanating  $64 \times 64$  particles in  $t = 1.f$