





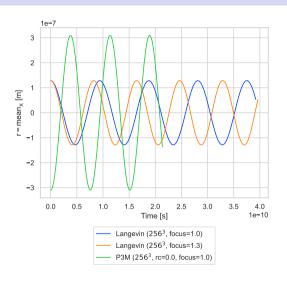
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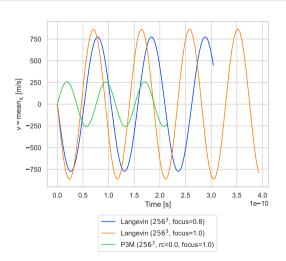
Discussion DIH

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Mean Statistics





Mean radius in X direction

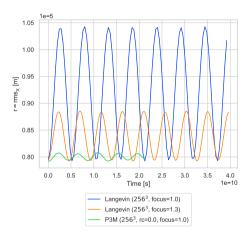
Mean velocity in X direction

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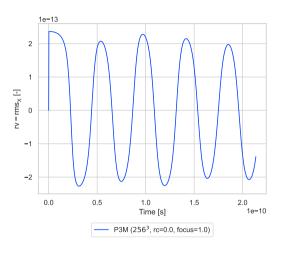
Investigating the Focus Force

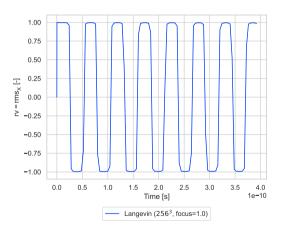


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Correlation Statistics



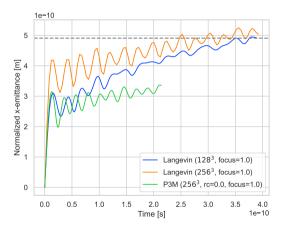


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Comparison to P3M

Change in mesh size drastically improves results:



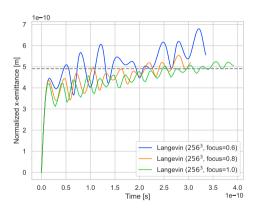
Normalized Emittance of a cold sphere (no collisions), showing diverging emittance.

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Comparison to P3M

Constant focusing factor is an important hyperparameter:



Langevin (2563, focus=1.5) Langevin (2563, focus=2.5) Normalized x-emittance [m] 0 0.0 0.5 1.0 2.0 2.5 3.0 Time [s] 1e-10

Decreased Constant Focusing

Increased Constant Focusing

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Conclusion about Results

- Emittance coincides to some extent with Severin's results
- The other statistics are not yet in agreement (though they must have been at some point?)

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