Particletrack2 / Particleanalyze documentation

Conventions

Ntime = number of timepoints

model (imported into particleanalyze as handles.data.model) ->

Initparams

params\_1dot (Ntime x 13 array)

(:, 1) = constant background

Nucleus Model Parameters

(:, 2:4) = centroid x, y, z coordinates

(:, 5) = sigma x

(:, 6) = sigma y

(:, 7) = sigma z

(:, 8) = covariance

(:, 9) = peak height

Dot Parameters

(:, 10:12) = dot centroid x, y, z coordinates

(:, 13) = peak height

fit\_1dot (1 x Ntime array)

rms error in 1 dot fit

startims

modelims\_1dot

modelims\_2dot

params\_2dot (Ntime x 17 array)

(:, 1) = constant background

Nucleus Model Parameters

(:, 2:4) = centroid x, y, z coordinates

(:, 5) = sigma x

(:, 6) = sigma y

(:, 7) = sigma z

(:, 8) = covariance

(:, 9) = peak height

Dot 1 Parameters

(:, 10:12) = dot centroid x, y, z coordinates

(:, 13) = peak height, identical for both dots

Dot 2 Parameters

(:, 14:16) = dot centroid x, y, z coordinates

fit\_2dot (1 x Ntime array)

rms error in 2 dot fit

ADDED by particleanalyze

ndots (1 x Ntime array; added after loading into particleanalyze)

1 if 1 dot model is best fit, 2 if 2 dot model is best

dotI (1 x Ntime array)

Dot intensity from best model

Flags (1 x ? cell array)

Flags on the current dot; currently supported terms are

‘curious’, ‘single’, ‘splitting’, ‘disappearing’