'cut and shift' vs 'weight=0'

Table: transit times τ_D after new vs old correction method in simulated fluorescence traces [1]

	$\begin{array}{c} \text{simulated } \tau_D[\text{ms}] \\ \text{log } 10\% \text{ tol.} \end{array}$	163 98-272	141 86-231	113 70-181	56 38-84	28 20-39	19 14-25	11.3 8.8-14.4	3.76 3.29-4.29
type of processing	fit								
control: no correction	1 species	58.92	142.83	80.93	145.00	27.55	54.11	110.39	287.87
	2 - fast sp. 2 - slow sp.	15.85 229.90	$70.02 \\ 445.84$	12.82 138.39	53.66 446.38	$\frac{13.17}{383.01}$	$\frac{16.68}{424.67}$	47.23 284.90	$\frac{16.59}{643.73}$
new method: cut and shift	1 species	161.43	130.03	100.67	53.11	26.25	17.43	11.52	3.62
	2 - fast sp. 2 - slow sp.	$\frac{120.86}{429.73}$	4.33 131.89	100.67 100.68	0.00 53.11	$0.01 \\ 26.34$	17.43	11.52	3.62 3.62
old method: weight=0	1 species	383.41	253.55	293.12	301.92	287.00	143.32	142.88	362.80
	2 - fast sp. 2 - slow sp.	28.66 819.05	45.97 1158.57	36.14 723.50	44.09 1733.81	$\frac{19.30}{747.77}$	10.94 211.09	34.31 1041.96	20.37 775.82

 $^{^{[1]}}$ Green = inside tolerance range. Orange = outside tolerance range. Simulated large cluster speeds: $1127 ms,\,113 ms,\,11 ms.$

Neural network informed photon filtering

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Background and Theory

FCS Artifact

Results

Pipeline

'cut and shift' correction Machine Learning - Skip

Discussion

iscussion