Functions' Complexity

#	Name	Mathematic Definition	Programs' Definition	Complexity (n_b)
1	Pseudo Delta	$\text{Height} \cdot \exp\left(-\left(\frac{\tau-\tau_0}{\sigma}\right)^2\right)$	$D(\text{Height}, \tau-\tau_0)$	2
2	Pseudo Delta for low τ		$U(\text{Height}, \tau-\tau_0)$	
3	Pseudo Delta for high τ		$Y(\text{Height}, \tau-\tau_0)$	
4	Gaussian	$\text{Height} \cdot \exp\left(-\left(\frac{\tau-\tau_0}{\sigma}\right)^2\right)$	$G(\text{Height}, \tau-\tau_0, \sigma)$	3
5	Lorentzian	$\frac{\text{Height}}{1+\left(\frac{\tau-\tau_0}{\gamma}\right)^2}$	$L(\text{Height}, \tau-\tau_0, \gamma)$	3
6	Hyperbolic Secant	$\text{Height} \cdot \text{sech}\left(\frac{\tau-\tau_0}{\sigma}\right)$	$S(\text{Height}, \tau-\tau_0, \sigma)$	3
7	Cole - Cole	$\text{Height} \cdot \frac{\sin((1-\alpha)\cdot\pi)}{\cosh(\alpha\cdot(\tau-\tau_0)) - \cos((1-\alpha)\cdot\pi)}$	$C(\text{Height}, \tau-\tau_0, \alpha)$	3
8	Kirkwood Fuoss	$\text{Height} \cdot \frac{\cos\left(\alpha\cdot\frac{\pi}{2}\right)\cdot\cos(\alpha\cdot(\tau-\tau_0))}{\cos^2\left(\alpha\cdot\frac{\pi}{2}\right)+\sinh^2(\alpha\cdot(\tau-\tau_0))}$	$B(\text{Height}, \tau-\tau_0, \alpha)$	3
9	Pearson VII	$\frac{\text{Height}}{\left(1+\left(2\cdot\frac{(\tau-\tau_0)\cdot\sqrt{2^{\frac{1}{m}-1}}}{s}\right)^2\right)^m}$	$P(\text{Height}, \tau-\tau_0, s, m)$	4
10	Losev	$\frac{\text{Height}}{\exp\left(\frac{-(\tau-\tau_0)}{\sigma_1}\right)+\exp\left(\frac{(\tau-\tau_0)}{\sigma_2}\right)}$	$A(\text{Height}, \tau-\tau_0, \sigma_1, \sigma_2)$	4
11	Havriliak Negami	$\text{Height} \cdot \frac{10^{(\tau-\tau_0)\cdot\alpha\cdot\gamma}\cdot\sin\left(\gamma\cdot\arctan\left\lvert\frac{\sin(\alpha\cdot\pi)}{10^{(\tau-\tau_0)\cdot\alpha\cdot\gamma}+\cos(\alpha\cdot\pi)}\right\rvert\right)}{(100^{(\tau-\tau_0)\cdot\alpha}+2\cdot10^{(\tau-\tau_0)\cdot\alpha}\cdot\cos(\alpha\cdot\pi)+1)^{\frac{\gamma}{2}}}$	$H(\text{Height}, \tau-\tau_0, \alpha, \gamma)$	4

12	Asymmetric Gaussian	$\text{Height} \cdot \exp\left(-\left(\frac{\tau-\tau_0}{\sigma_1}\right)^2\right) \quad \text{if} \quad \tau < \tau_0$ $\text{Height} \cdot \exp\left(-\left(\frac{\tau-\tau_0}{\sigma_2}\right)^2\right) \quad \text{if} \quad \tau > \tau_0$	$F(\text{Height}, \tau-\tau_0, \sigma_1, \sigma_2)$	4
13	Asymmetric Lorentzian	$\frac{\text{Height}}{1+\left(\frac{\tau-\tau_0}{\gamma_1}\right)^2} \quad \text{if} \quad \tau < \tau_0$ $\frac{\text{Height}}{1+\left(\frac{\tau-\tau_0}{\gamma_2}\right)^2} \quad \text{if} \quad \tau > \tau_0$	$K(\text{Height}, \tau-\tau_0, \gamma_1, \gamma_2)$	4
14	Asymmetric Hyperbolic secant	$\text{Height} \cdot \text{sech}\left(\frac{\tau-\tau_0}{\sigma_1}\right) \quad \text{if} \quad \tau < \tau_0$ $\text{Height} \cdot \text{sech}\left(\frac{\tau-\tau_0}{\sigma_2}\right) \quad \text{if} \quad \tau > \tau_0$	$E(\text{Height}, \tau-\tau_0, \sigma_1, \sigma_2)$	4
15	Pseudo Voigt	$\text{Height} \cdot \left(f \cdot \exp\left(-\left(\frac{\tau-\tau_0}{\sigma}\right)^2\right) + \frac{1-f}{1+\left(\frac{\tau-\tau_0}{\gamma}\right)^2}\right)$	$V(\text{Height}, \tau-\tau_0, \sigma, \gamma, f)$	5