Error over iterations

Data vs Function

Out[3055]=

LSTemp and LSTolerance: 0.005 0.001

Data frequencies: {0., 209.67, 241.086, 273.067, 280.167, 311.52, 365.681, 417.141, 441.771, 455.342, 481.292, 499.388, 556.879, 586.598, 613.113, 629.01} Not Normalized

-4.36114, 2.8914, 0.791839, -1.73896, 1.28991, -2.92644, -3.047, 0.483877, 3.71088, -2.10976, 3.79562, 2.05558, 0.938142, -0.100349, 0.954082, 0.951584, -2.82195, 0.165601, 1.76917, 3.45676, -2.51341, 4.94081, 3.26695, 1.16077, -3.01951, -3.23227, 2.47093, 3.74866, -4.80033, 4.78124, 3.16218, 4.67388, -1.75118, 0.508635, -4.87284, -1.01143, 1.39624, 2.75883, -3.38912, 2.01199, 4.35854, 4.31268, -2.13214, -2.74139, 2.81681, -3.48856, 2.49877, -4.31525, -0.856524, 3.89777, 0.811335, 3.14691, -2.09703, 2.82087, -4.62382, -4.94998, 4.93175, 4.01164, -4.79869, 2.52064, 3.89653, -2.56505, 4.32812, -2.51768, -2.14494, 1.74516, -4.54606, 0.174195, -1.66347, -3.8262, -1.41715, 2.31659, 3.13558, 4.06307, -3.17382, 3.58039, -1.33435, -2.12661, 4.66303} InitialParams {4.65387, -1.57027, -4.99217, -3.70359, 0.994931, 1.99885, -1.83724, 0.696804, -3.42369, -2.69131, -3.03972, -3.32609, -0.529341, 1.33401, 3.91925, 4.60934, -2.37966, 2.72653, -1.23529, 2.2019, 4.96926, 4.93096, 2.34689, 3.50318, -3.77922, 1.45234, 4.70968, -0.210884, -1.92254, 0.461324, 2.58129, 3.41932, 0.0633205, 3.91604, -2.68563, 0.830483, 3.88733, -2.50339, -2.661, -0.368149, -2.71839, -3.34124, 0.738626, 0.533989, -3.47401, 4.50944, 1.31808, 0.231169, -2.47185, 4.95983, -4.64156, -1.21412, -1.05627, 3.05436, 3.25243, 0.712351, -1.85249, 0.697341, 3.2556, -4.94526, 0.710076, 3.59751, -1.07768, -3.68923, 0.63747, 1.10283, 2.6537, -4.55543, 0.0346953, -0.450045, -4.47795, 1.58035, -4.0069, -2.88647, -2.11588, -3.70967, -0.708833, 0.441727, 3.6084, -3.11156, 4.6711, -4.52804, 3.62663, 0.634919, 4.67642, 0.858256, 4.02592, 2.39976, -0.645484, 3.77935, 2.94508, 0.268047, 0.499791, -1.29409, -2.63667, -3.55183, 1.30822, -4.82725, 4.81334, 1.7146} FitFunction: $#2 + #1*#3 + #1^2*#4 + #1^3*#5 + #1^4*#6 + #1^5*#7 + #1^6*#8 + #1^7*#19 + #1^10*#12 + #1^10*#13 + #1^10*#13 + #1^10*#15 + #1^10*#16 + #1^10*#16 + #1^10*#17 + #1^10*#18 + #1^10*#19 + #$ + $\pm 1^19*\pm 21$ + $\pm 1^20*\pm 22$ + $\pm 1^20*\pm 23$ + $\pm 1^22*\pm 24$ + $\pm 1^23*\pm 25$ + $\pm 1^23$ $\pm 1^35 \times \pm 37 + \pm 1^36 \times \pm 38 + \pm 1^37 \times \pm 39 + \pm 1^38 \times \pm 40 + \pm 1^39 \times \pm 41 + \pm 1^40 \times \pm 42 + \pm 1^41 \times \pm 43 + \pm 1^41 \times \pm 4$ + $\pm 1^52 \times \pm 54$ + $\pm 1^53 \times \pm 55$ + $\pm 1^54 \times \pm 66$ + $\pm 1^54 \times \pm 67$ + $\pm 1^56 \times \pm 10^5$ + $\pm 1^56 \times \pm$ $#1^68*#70 + #1^69*#71 + #1^70*#72 + #1^71*#73 + #1^72*#74 + #1^73*#75 + #1^74*#76 + #1^75*#77 + #1^76*#78 + #1^77*#79 + #1^78*#80 + #1^79*#81 + #1^80*#82 + #1^81*#83 + #1^82*#84 + #1^83*#85 +$

 $\text{TrueParams } \{3.15047, -2.40306, \ 3.10016, -2.11727, \ 3.81605, \ 2.0397, -1.10163, \ 4.81387, -2.87744, -0.3964, \ 4.91614, -2.75613, \ 1.15762, -3.94047, \ 3.85356, \ 0.0661181, -3.38703, \ 1.77437, \ 0.837491, -0.426467,$

 $\pm 1^84 \times \pm 186 + \pm 1^85 \times \pm 187 + \pm 1^86 \times \pm 187 + \pm 1^86 \times \pm 189 + \pm 1^87 \times \pm 189 + \pm 189 \times \pm 189 \times \pm 189 + \pm 189 \times \pm 1$