



Fig. 1 The data fit for the supernova light curve problem. The time axis is measured in Julian days, shifted by 2,440,000, and the vertical axis is the magnitude of the light emission.

where Φ_1 and Φ_2 are the relative contributions to the total luminosity by the decays of nickel and cobalt, respectively. We determine the four (nonlinear) α parameters and the two linear parameters c_1 and c_2 to fit the measured data. The first data observation is at time 16.99 days, and the optimal solution is (to 1 decimal digit) $\alpha = [5.3, 2.4, 19.5, 0.7]$, $c = [16.8, 5.6]$. The weights in \mathbf{W} were set to the inverses of the observed values.¹⁰