$$z(x,y) = \frac{c_x x^2 + c_y y^2}{1 + \sqrt{1 - (1 - k_x) c_x^2 x^2 - (1 + k_y) c_y^2 y^2}} + \sum_{i=1}^{16} \alpha_i x^i + \sum_{j=1}^{16} \beta_j y^j$$