

Notes on dftatom

To allow general, nonuniform meshes, all methods first transform equations on general mesh $R(t)$, with $1 \leq t \leq N+1$, to equations on a uniform mesh t with step size $h = 1$. If the solution of a general mesh is $P(r)$ and the transformed solution on the uniform mesh is $u(t)$ then:

$$u(t) = P(R(t)) \tag{1}$$

$$u'(t) = \frac{du}{dt} = \frac{dP}{dR} R'(t) \tag{2}$$