Another tder attempt

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10:42 AM

$$C_u^{s\gamma} = e^{\mathrm{ad}_u\{\beta(s)\}} \qquad \beta(0)=0$$

$$\frac{d}{ds}C_u^{s\gamma} = \mathrm{ad}_u^{\gamma /\!/ RC_u^{-s\gamma}} /\!/ C_u^{s\gamma}$$

$$\frac{d}{ds}e^{\mathrm{ad}_u^{\beta(s)}} \sim \left[\left(\mathrm{ad}_u^{\dot\beta(s)}\right) /\!/ \frac{1-e^{-\mathrm{ad}\left(\mathrm{ad}_u^{\beta(s)}\right)}}{\mathrm{ad}\left(\mathrm{ad}_u^{\beta(s)}\right)}\right] /\!/ C_u^{s\gamma}$$

$$\Rightarrow \dot\beta \sim \gamma /\!/ RC_u^{-s\gamma} /\!/ \frac{1-e^{-t\mathrm{ad}_u\beta(s)}}{t\mathrm{ad}_u\beta(s)}$$

Can be solved by power series. Not the prettiest.