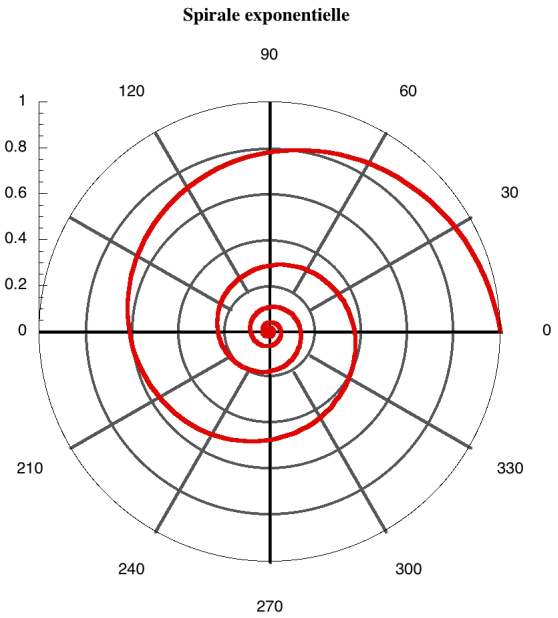

figure.2.a Spirale exponentielle

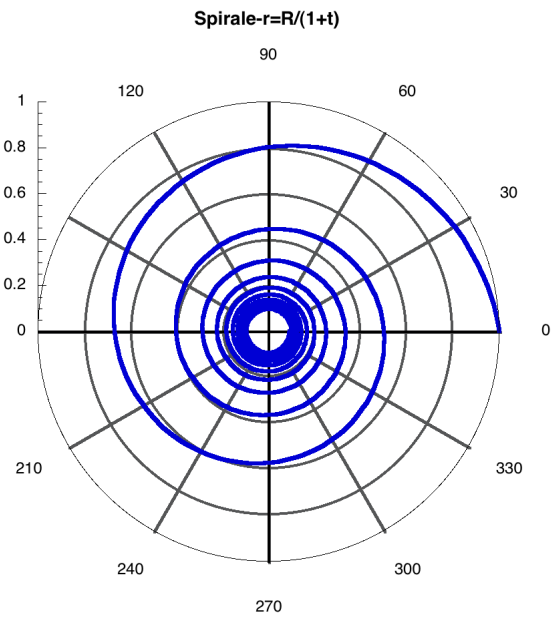

figure.2.b Spirale algèbrique

$\lambda(t) = r(t)/R = \exp(-t)$

$\lambda(t) = r(t)/R = 1/(1+t)$

avec $\lambda(0) = 1$, $\dot{\lambda}(0) = 1$et $\theta(t) = \omega t \in [0, 10\pi]$.

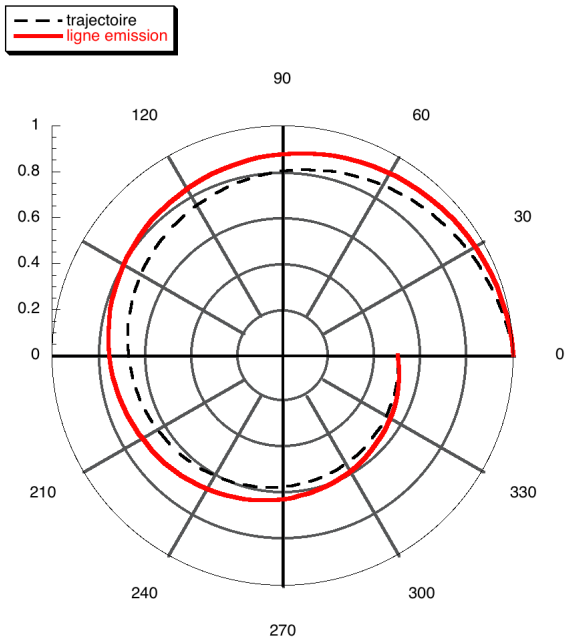

figure.3 Trajectoire et ligne d'émission

$\lambda(t) = r(t)/R = 1/(1+t)$ avec $\theta(t) = \omega t = 2\pi t \in [0, 2\pi]$

$r_{traj}(\theta) = R/(1+\theta/\omega)$ et $r_{emission}(\theta) = (R/2)(2-\theta/\omega)$