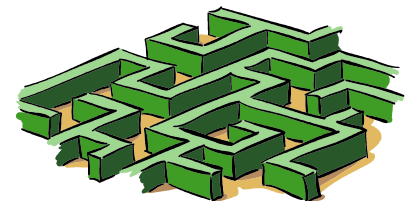
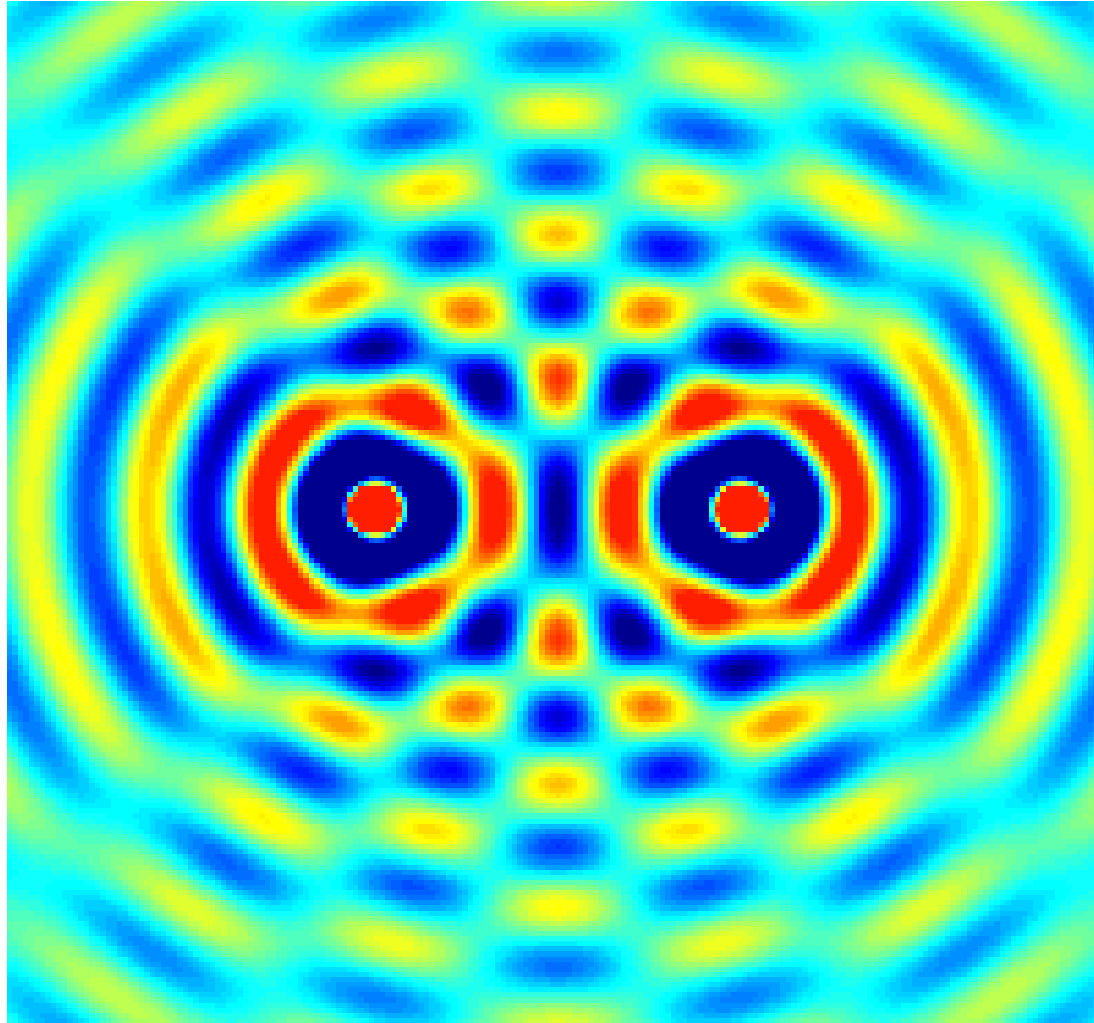
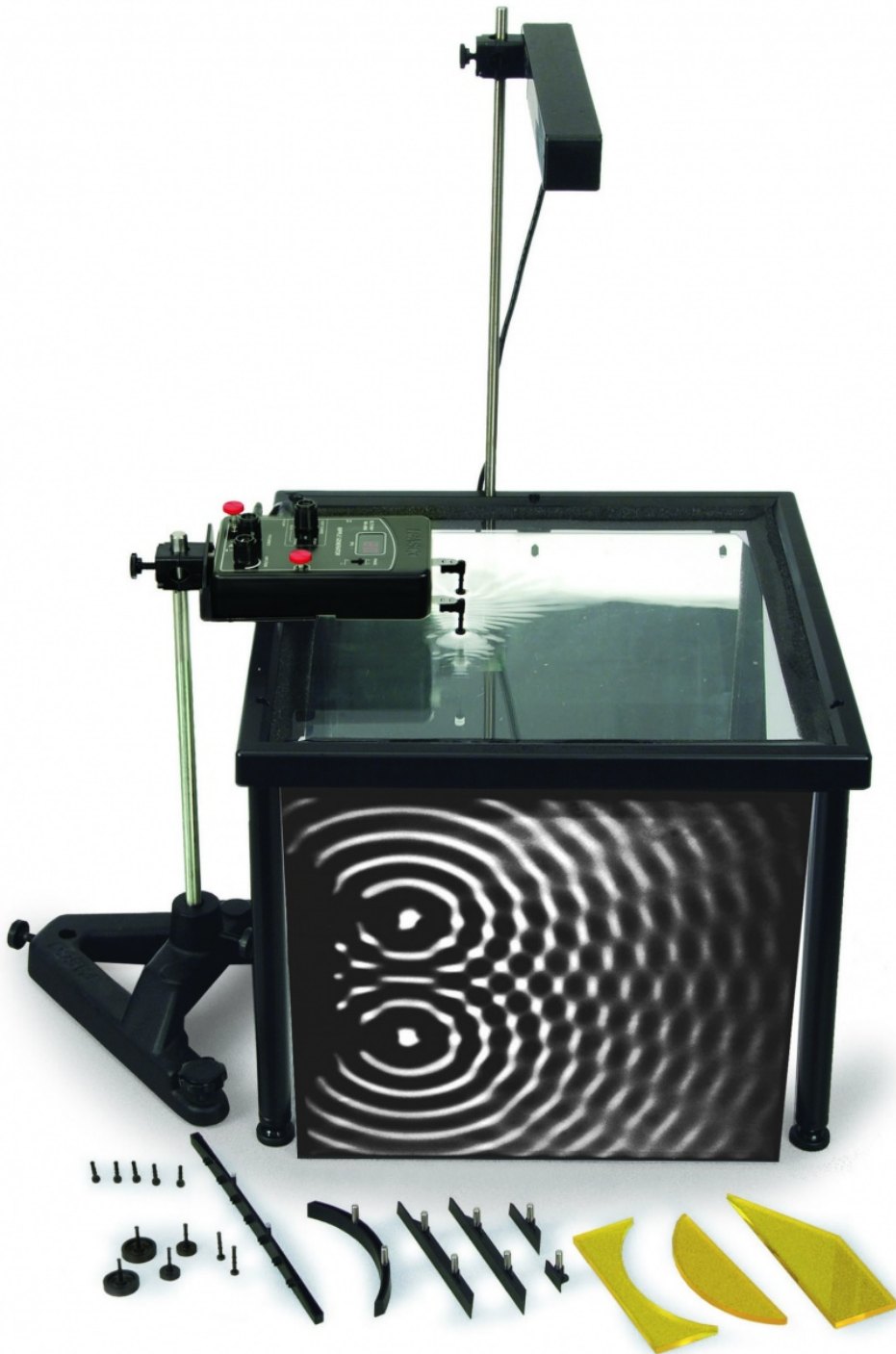


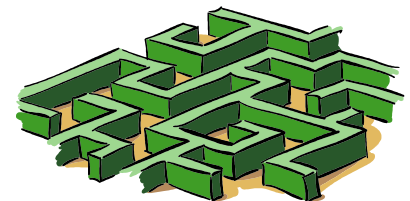
Συμβολή από δύο πηγές



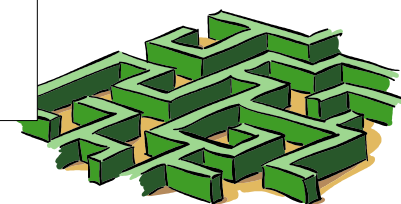
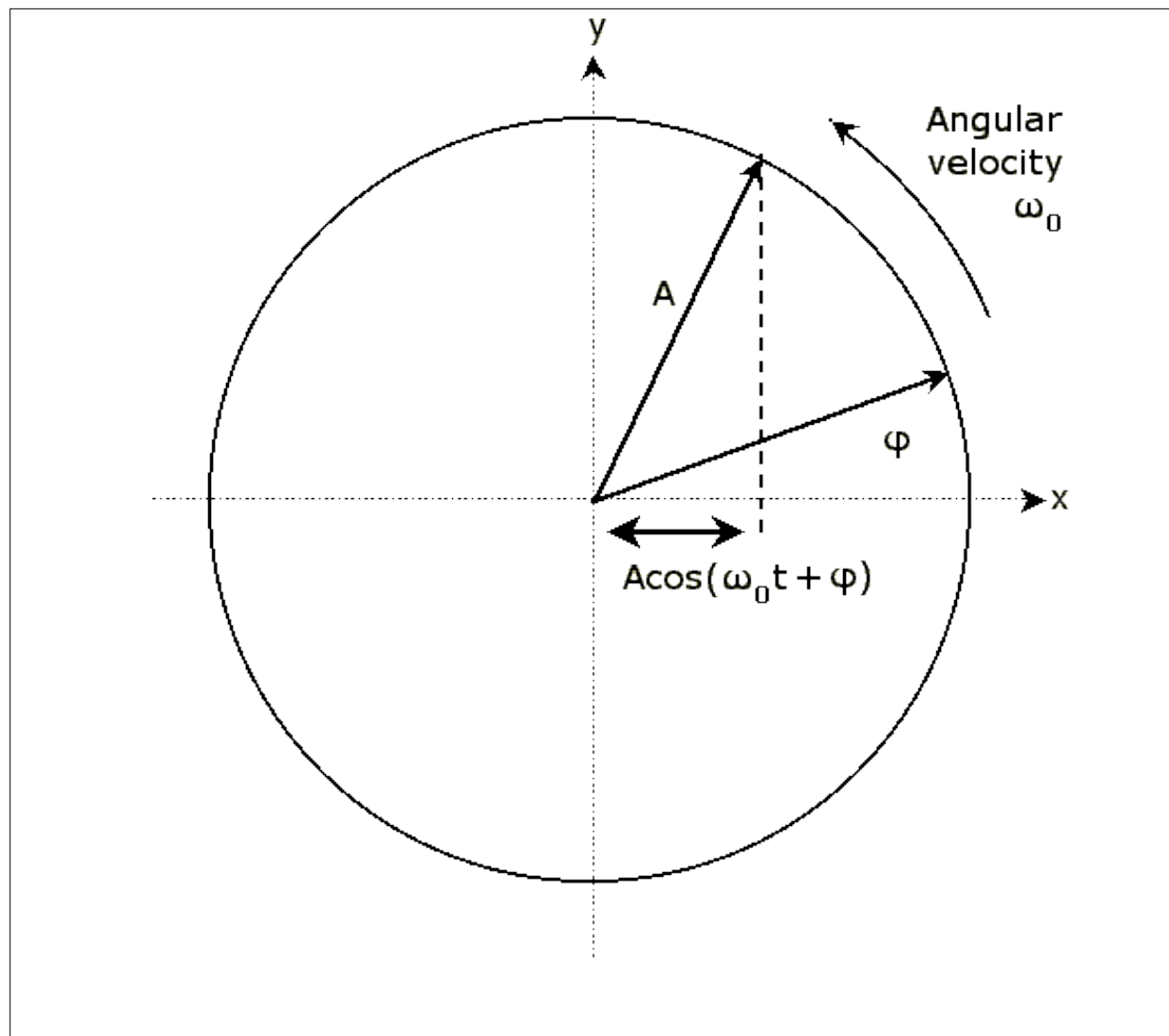
Παραδείγματα συμβολής από δύο πηγές



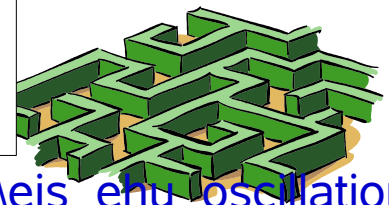
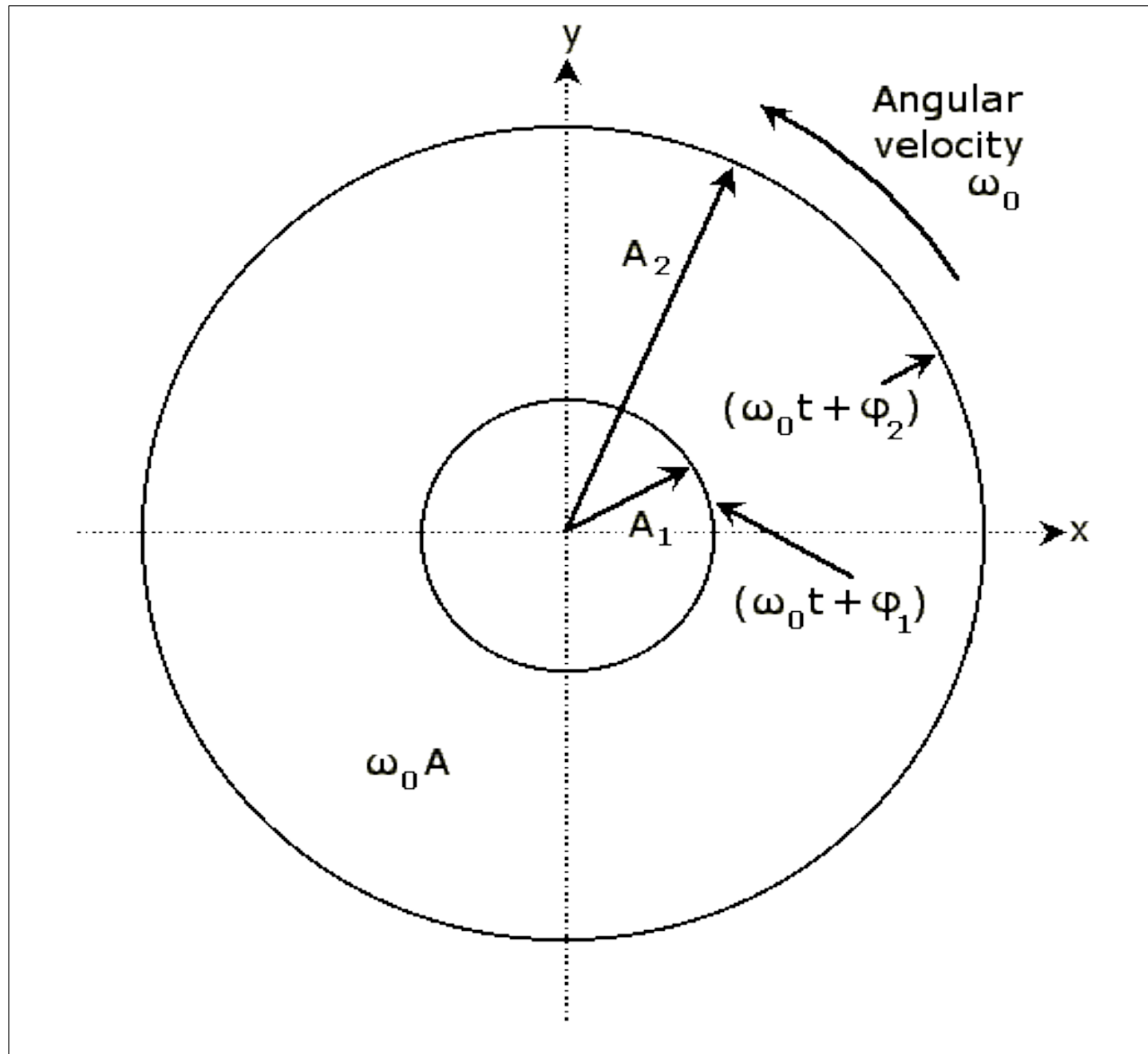
[J\PhysicsIV-Lectures\SYMBOLH\ripple\index.h](#)

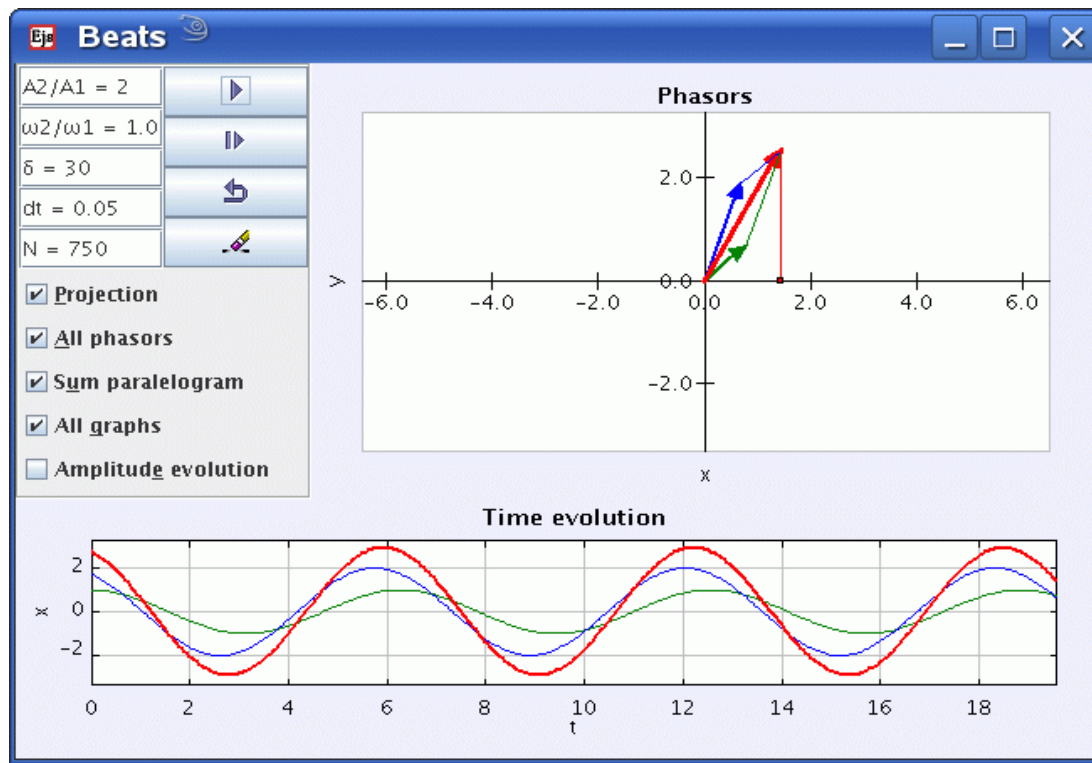


Αναπαράσταση των αρμονικών κυμάνσεων με στρεφόμενα ανύσματα



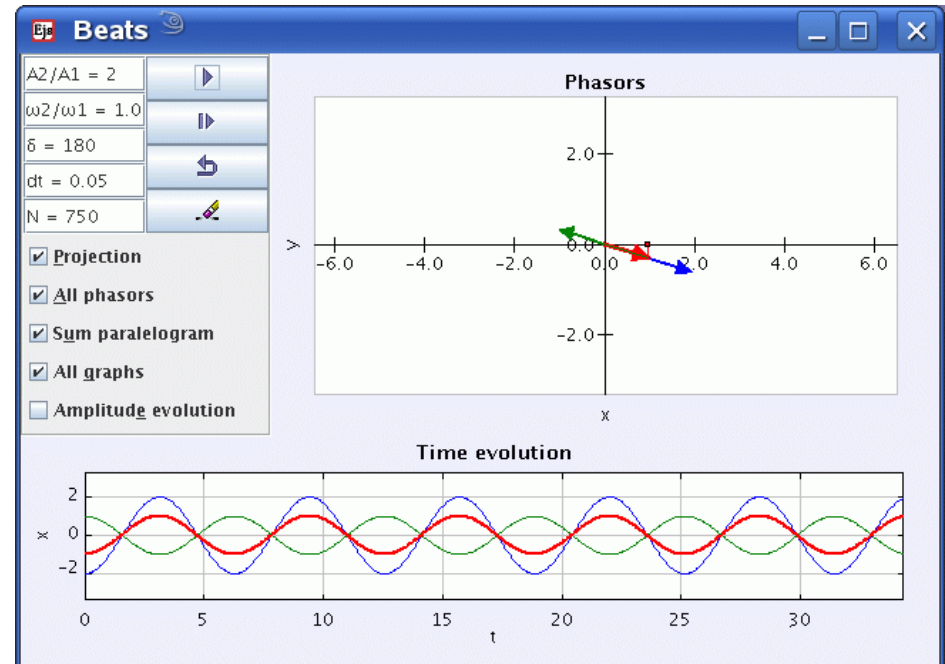
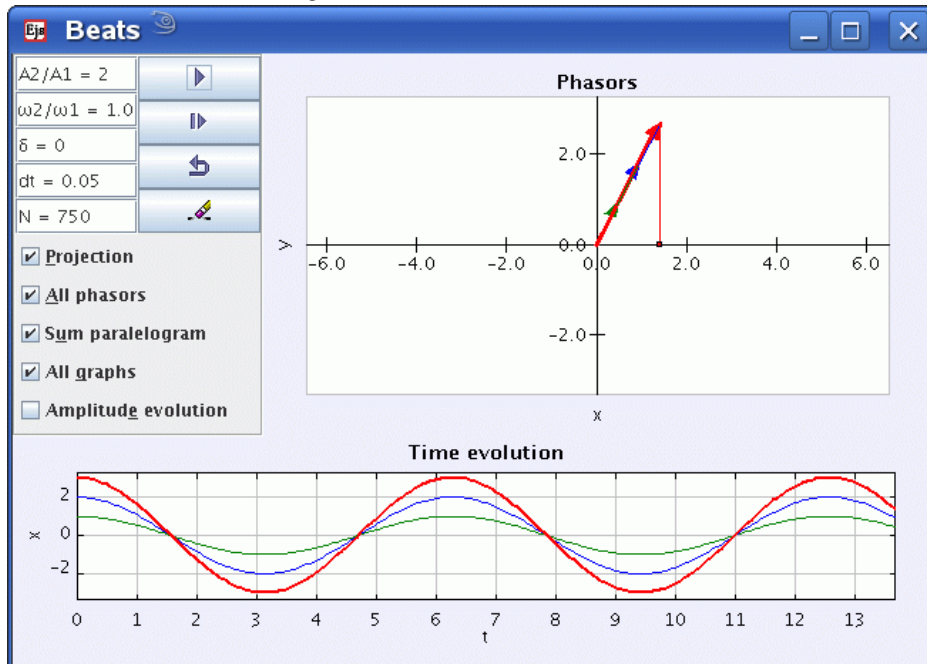
Άθροιση δύο αρμονικών κυμάτων αυθαίρετου πλάτους και φάσης





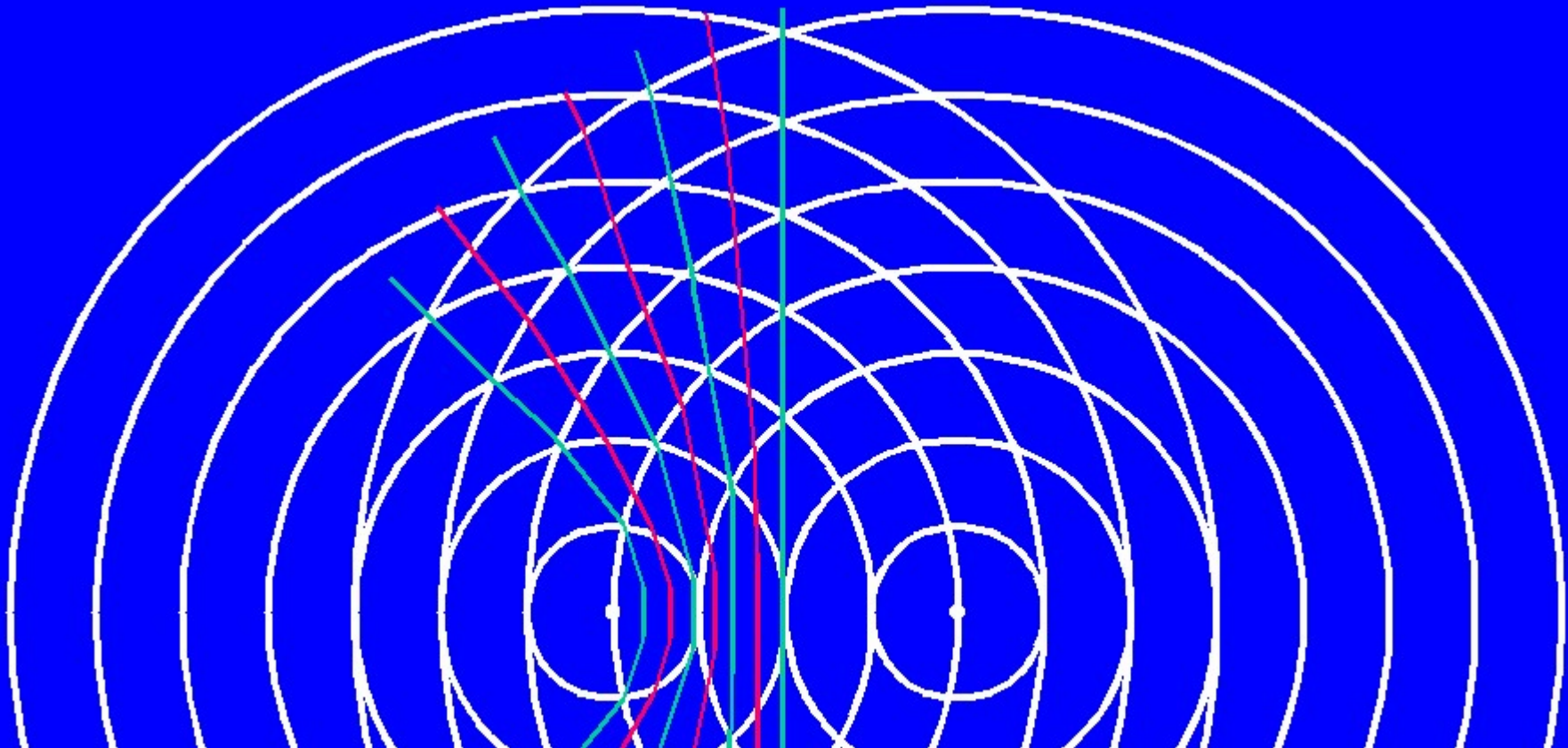
Ενισχυτική Συμβολή

Αποσβεστική Συμβολή



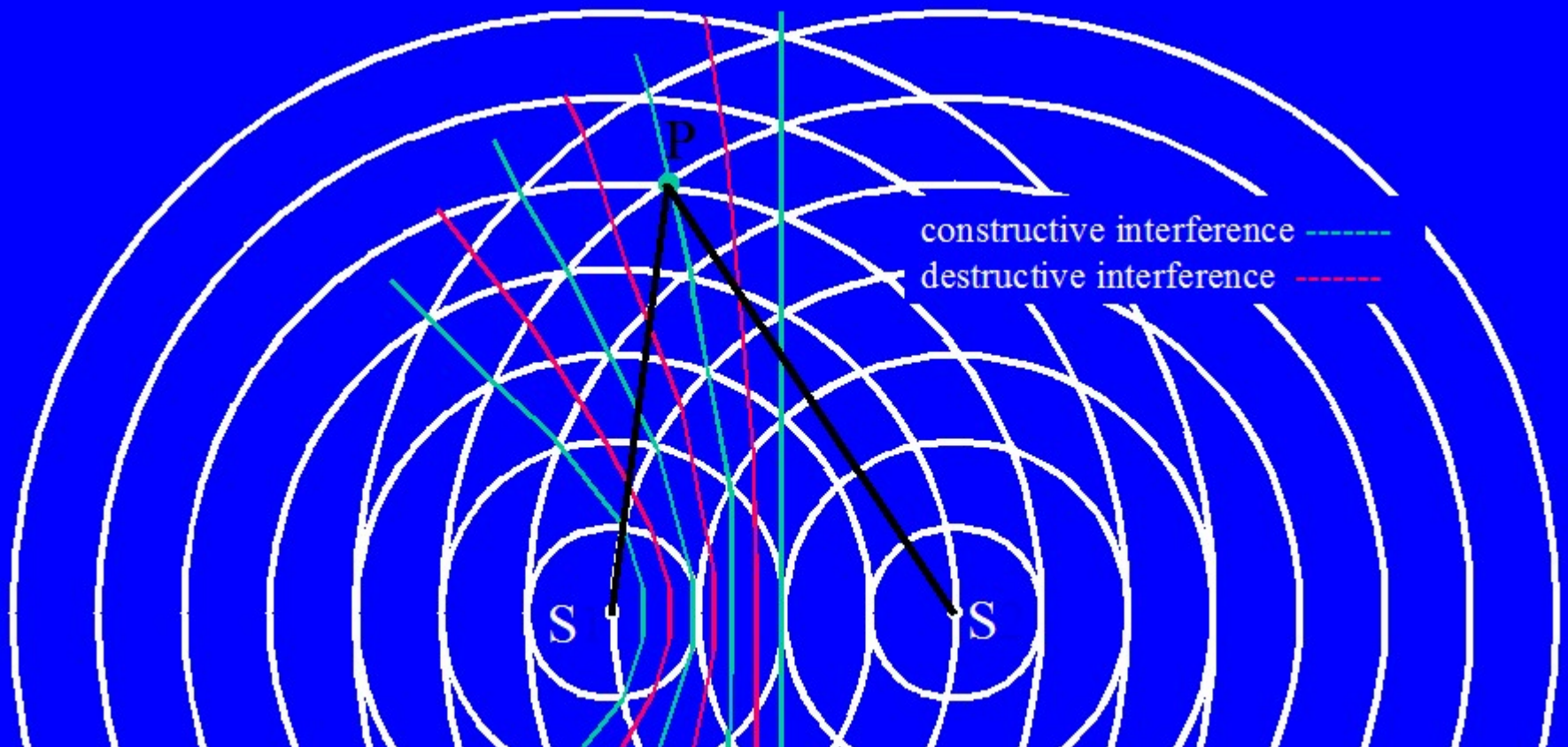
Two source interference

constructive interference -----
destructive interference -----



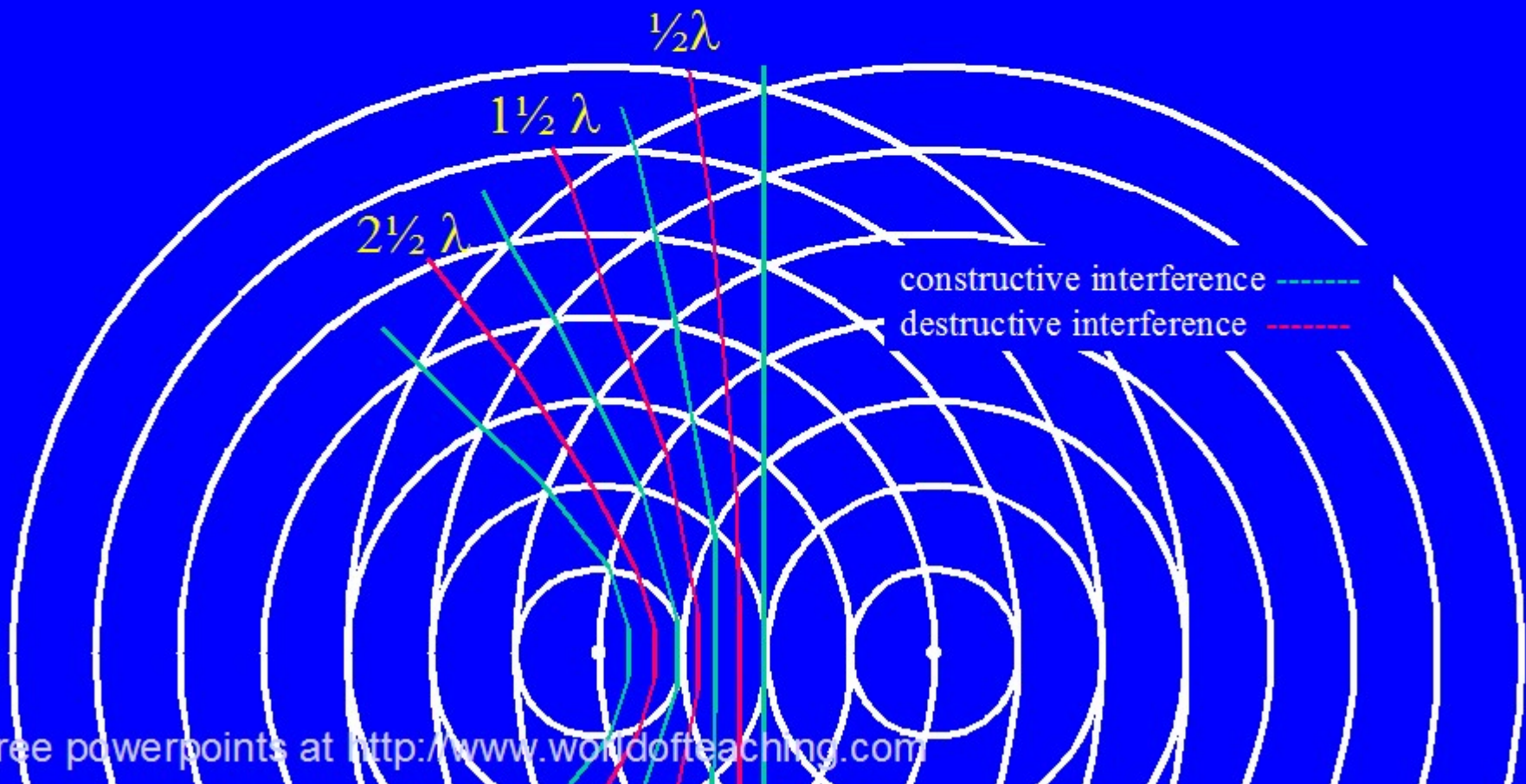
Two source interference

$$\begin{aligned}\text{Path difference} &= S_2P - S_1P \\ &= 1 \text{ wavelength} \\ &= \lambda\end{aligned}$$



Two source interference

Path difference for destructive interference = $(n + \frac{1}{2}) \lambda$
(where n is an integer)



Συμβολή δύο πηγών

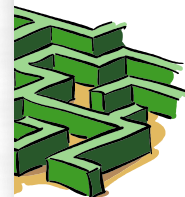
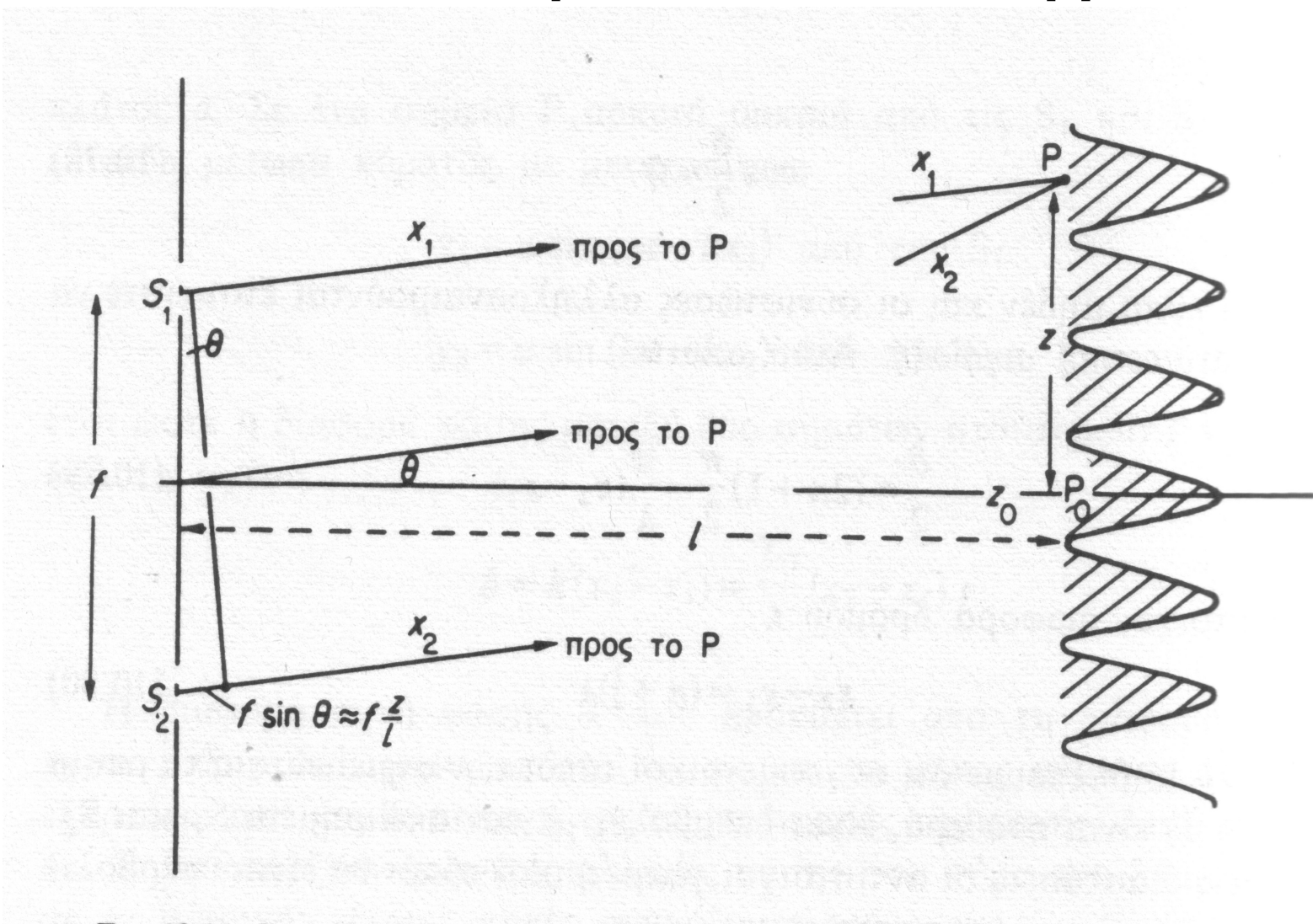
Η διαφορά του “οπτικού” δρόμου
είναι:

$n\lambda$ για ενισχυτική συμβολή

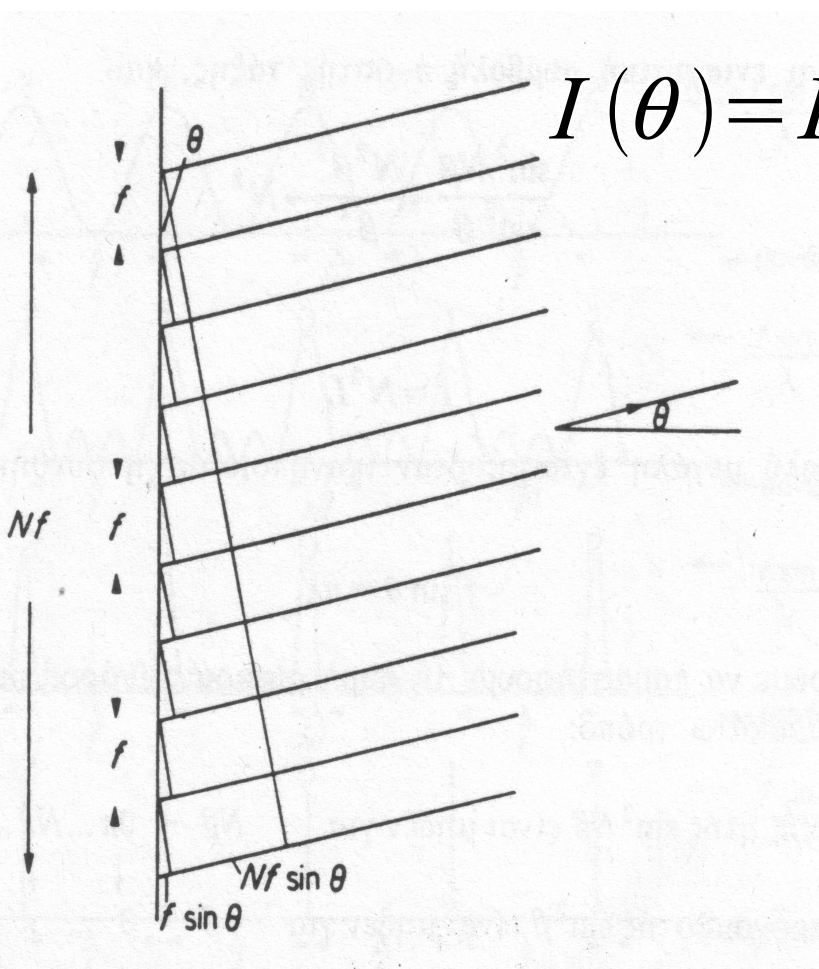
$(n + \frac{1}{2})\lambda$ για αποσβεστική
συμβολή



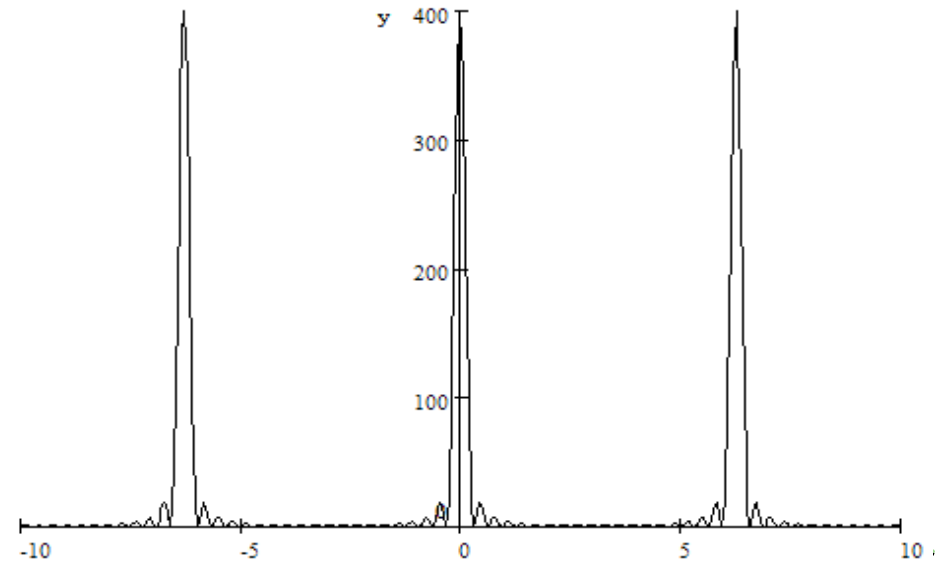
Συμβολή δύο πηγών άνευ
διαφοράς φάσης σε μεγάλη
απόσταση από τις πηγές.



Συμβολή N πηγών άνευ διαφοράς φάσης σε μεγάλη απόσταση από τις πηγές.



$$I(\theta) = I_0 \frac{\sin^2(N\beta)}{\sin^2(\beta)}, \quad \beta = \frac{\delta}{2} = \frac{f}{\lambda} \pi \sin \theta$$

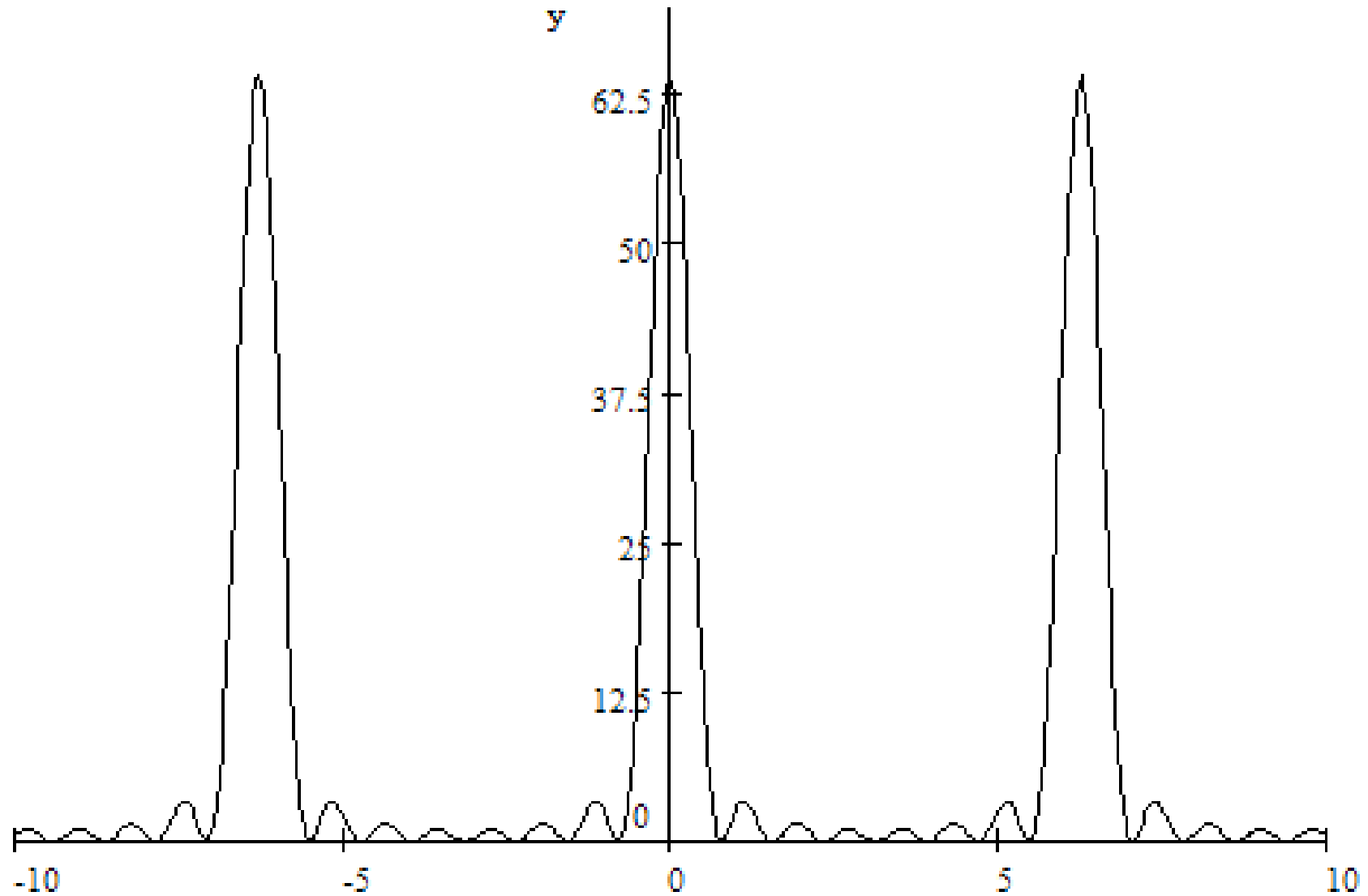


N=20

2\beta



$N=8$



N=20

