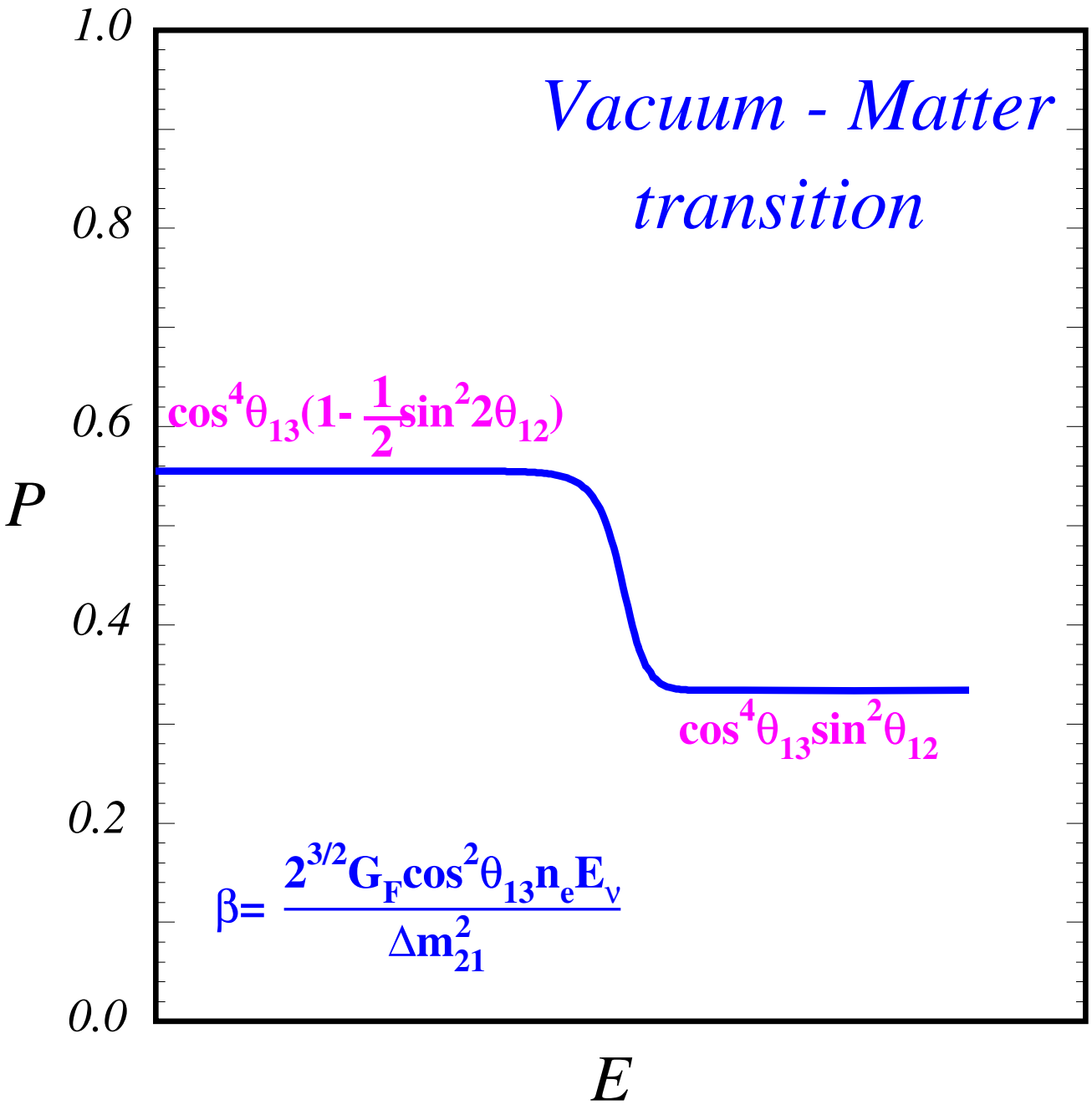
1.0
0.8
0.6
0.4
0.2
0.0
P
E
Vacuum - Matter transition
$\cos^4\theta_{13}(1-\frac{1}{2}\sin^2 2\theta_{12})$
$\cos^4\theta_{13}\sin^2\theta_{12}$
$\beta = \frac{2^{3/2} G_F \cos^2\theta_{13} n_e E_\nu}{\Delta m^2_{21}}$