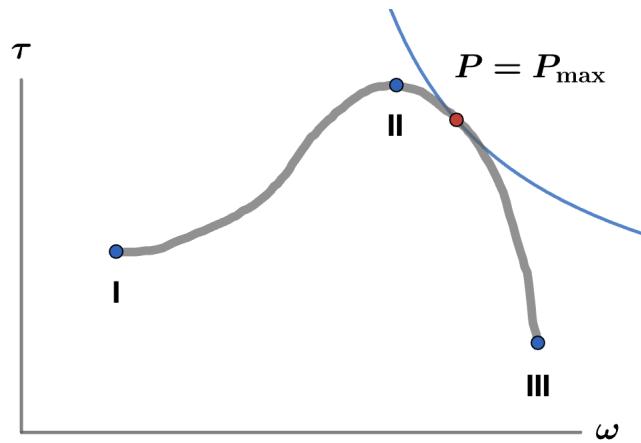


## 2011 F=ma Exam: Problem 22

Kevin S. Huang



Recall the instantaneous power is given by

$$P = \tau\omega$$

so lines of constant power are hyperbolas  $\tau \propto 1/\omega$  on a  $\tau$ - $\omega$  plot. The furthest hyperbola (maximum power) is tangent to the graph at a point between II and III so the answer is D.