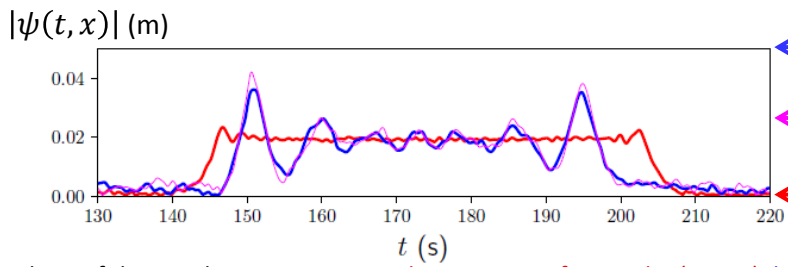


# Observation expérimentale de la modulation non-linéaire contra-propagative des bords d'un train d'onde de gravité à la surface d'un fluide

$$\eta(t, x) = \psi(t, x) \exp i(\omega_0 t - k_0 x)$$

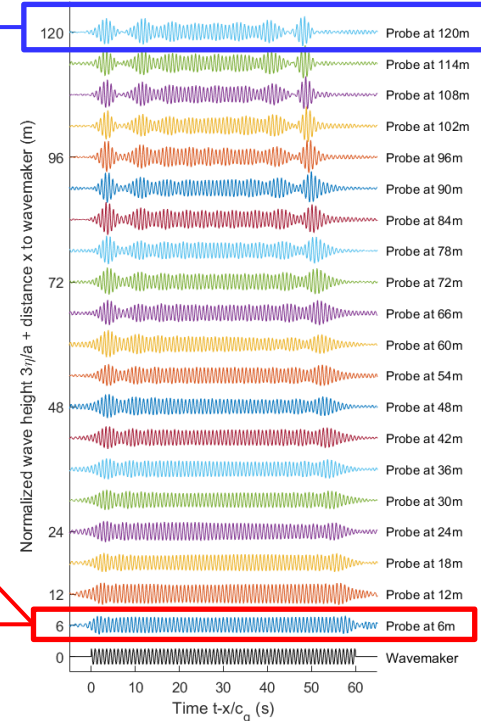


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Non-Linear Schrödinger Equation

$$i\partial_x \psi + \frac{1}{g} \partial_{tt} \psi + k_0^3 |\psi|^2 \psi = 0$$



Envelope of the 60-s long wavetrain, red: experiment first probe ( $x=6$  m), blue: experiment last probe ( $x=120$  m), Magenta : simulation of NLSE ( $x=120$  m) with initial condition taken as the first probe envelope (red signal)