# Model Equations for Water Waves

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This three-lecture minicourse begins with an indication of the derivation of systems of equations for describing the motion of both surface and internal waves. Fundamental questions of the well-posedness of these models will then be addressed. More subtle issues connect with comparisons between the models and with how well they can be expected to work will then be discussed.

1. Derivation and elementary properties.

2. Well-posedness

3. Riogorous comparisons between models.