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Extended Shallow Water Equations

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We will present, a brief review of the shallow water wave theory. As such, we derive, in a pedagogical manner, the equations describing waves propagating in shallow water, and emphasize on some of their applications. Special emphasis will be given to the Korteweg-de Vries and Kadomtsev-Petviashvili equations.

References

- [1] T.P. Horikis, D.J. Frantzeskakis and N.F. Smyth, *Wave Motion*, to appear, (2022).