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## **Numerical Modeling for Water Engineering and Obstacle Theory**

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**Abstract:** Numerical analysis is a branch of mathematics devoted to the development of iterative matrix calculation techniques. We are searching for operations optimization as objective to calculate and solve systems of equations of order n with time and energy saving for computers that are conducted to calculate and analyze big data by solving matrix equations. Furthermore, this scientific discipline is producing results with a margin of error of approximation called rates. Thus, the results obtained from the numerical analysis techniques that are held on computer software such as MATLAB or Simulink offers a preliminary diagnosis of the situation of the environment or space targets. By this we can offer technical procedures needed for engineering or scientific studies exploitable by engineers for water.

**Keywords:** numerical analysis methods, obstacles solving, engineering, simulation, numerical modeling, iteration, computer, MATLAB, water, underground, velocity

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