Development of residual distribution for shallow water flows.

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In this talk we recall the development of residual distribution for shallow water flows. Starting from the analogy with the concept of fluctuation splitting in 1D, we show the potential of this approach in designing genuinely multidimensional well balanced schemes. To further illustrate this potential, more recent work on the design of adaptive schemes on moving meshes and in curvilinear coordinates will be discussed, as well as some improvements in the treatment of wet/dry states and friction.