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Lecture by

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DEVELOPMENTS IN PORTS AND COASTAL ENGINEERING IN ITALY

SUMMARY

The lecture gives an overview of the past and present evolution and achievements of harbour and coastal engineering in Italy, starting with the technical heritage of ancient ports, especially developed by the Romans.

Attention is then focused on the recent developments, particularly related to monolithic vertical breakwaters, which are widely used in Italian harbours.

The most interesting results of both scientific research and practical design and construction are highlighted. An outline of the new Italian Recommendations for Breakwater Design is also given, with special attention to the stability of caisson breakwaters.

An illustrated description of two new important projects of protected beach nourishments (Ostia Lido, Venetian Lidos) is then provided, since these coastal works are becoming quite popular for the protection and exploitation of the valuable Mediterranean sandy beaches.

Finally the lecture will give some general information about the present topics and results of laboratory research and prototype measurements (including the Wave Recording Network) and about ongoing projects and prospects for new coastal works, which are mainly addressed to waterfront renovation, marinas and beach protection with "environmentally friendly" structures.

A selected list of papers by the author related to these subjects is attached herewith and a reprint copy of each paper is also supplied.