

A.A. 2025-2026 ELEMENTI DI TERMOFLUIDODINAMICA PER LE MACCHINE

Lucia Parussini

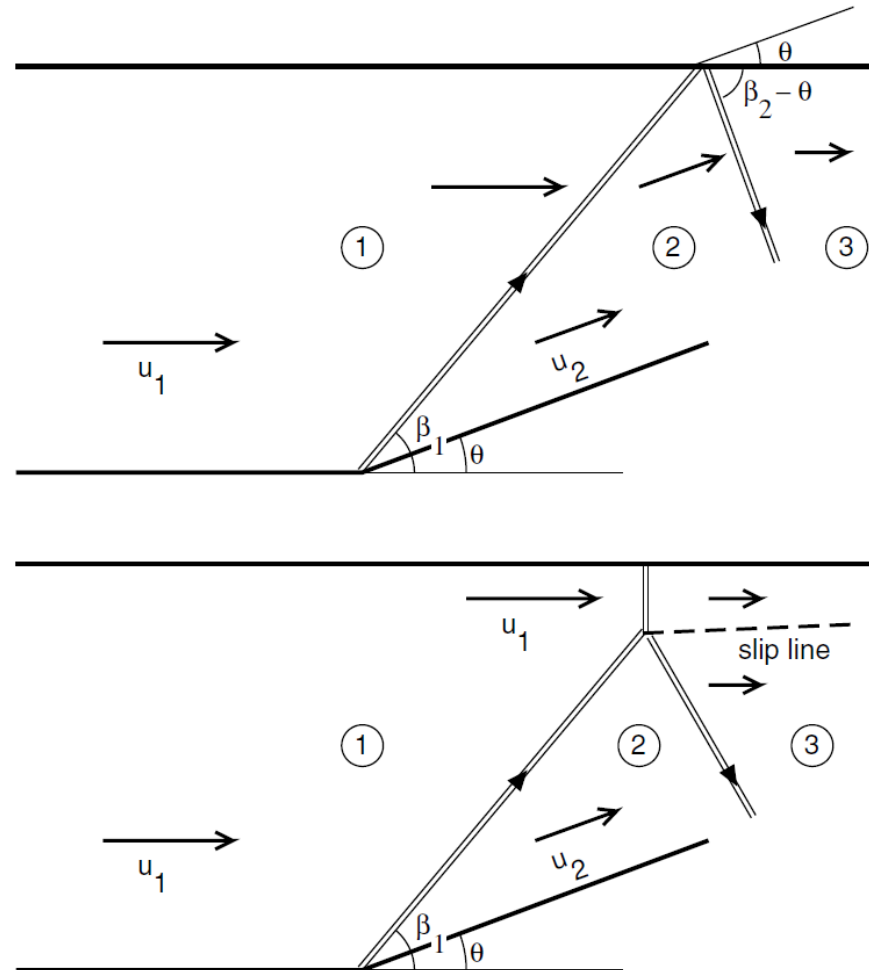
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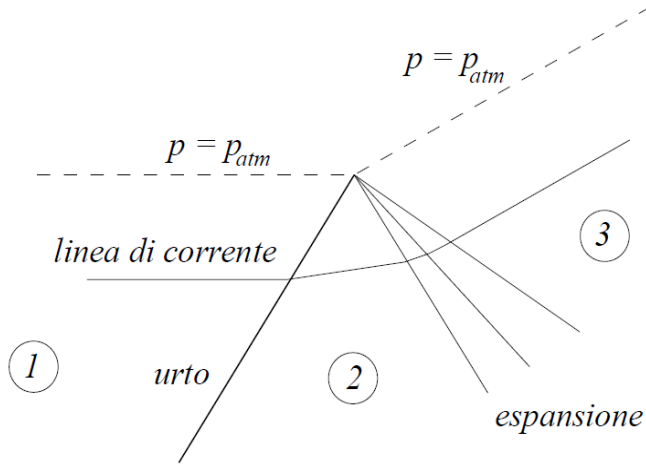
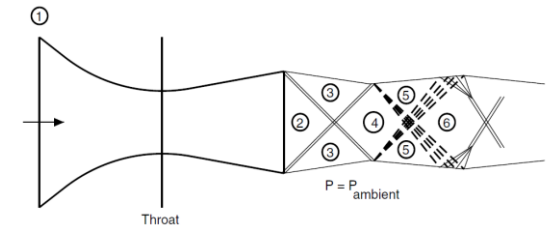
Onde d'urto

Onde d'urto oblique riflesse



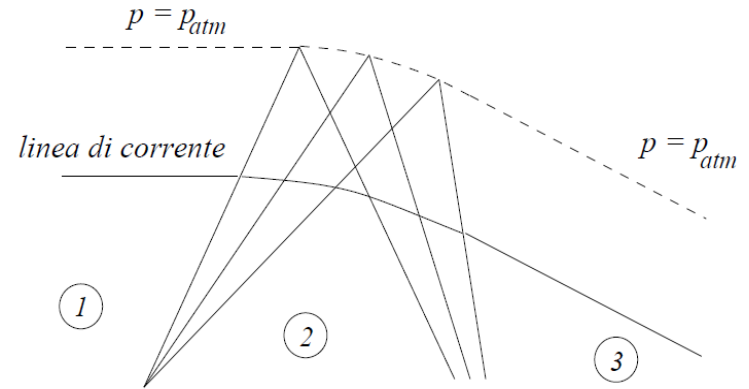
Onde d'urto

Riflessione da un confine libero



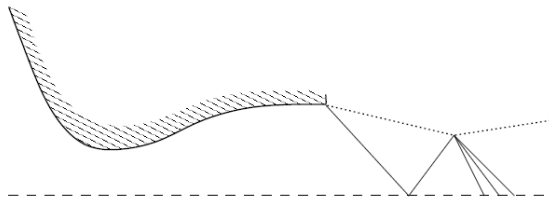
$$p_2 > p_{atm}$$

$$p_1 = p_3 = p_{atm}$$

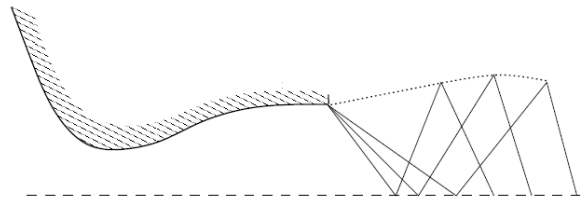


$$p_2 < p_{atm}$$

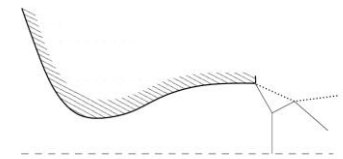
$$p_1 = p_3 = p_{atm}$$



Ugello sovra-espanso



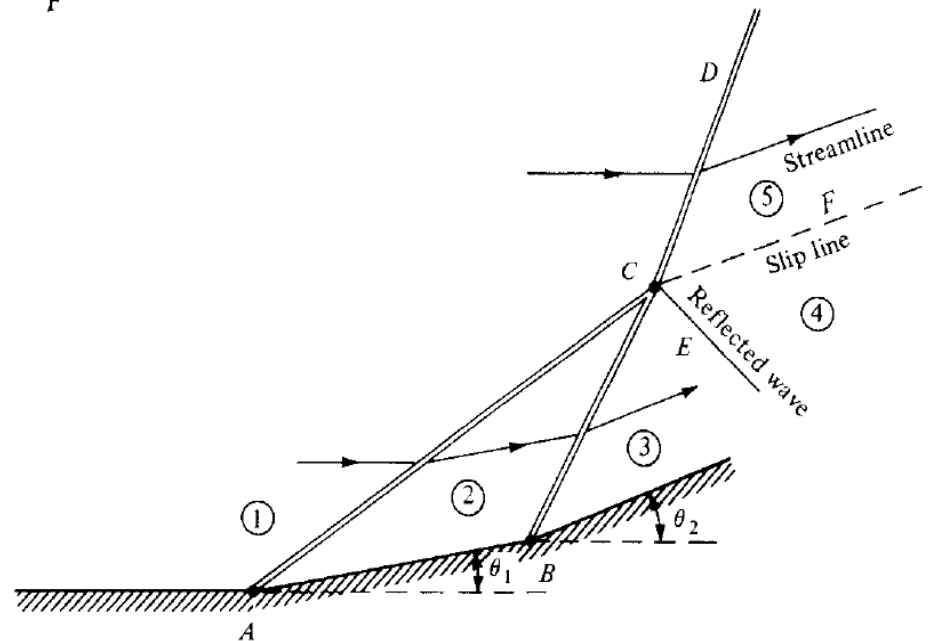
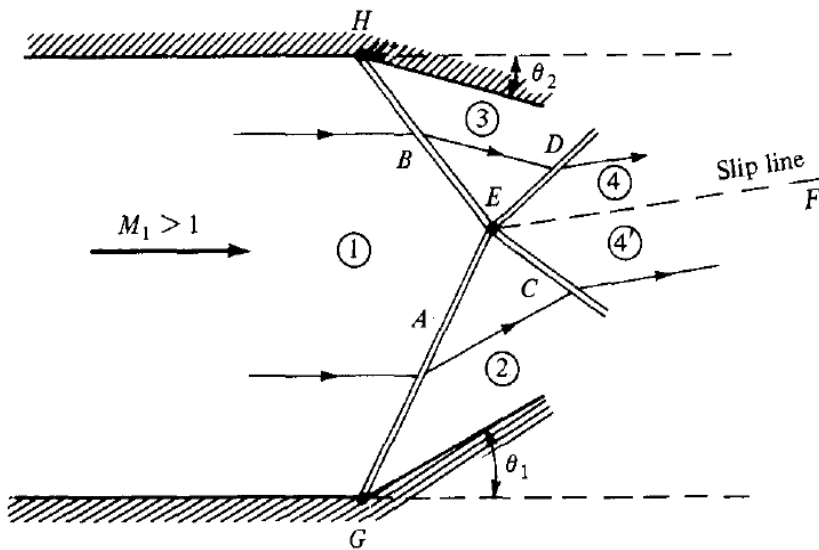
Ugello sotto-espanso



Mach disc nel caso di ugello sovra-espanso

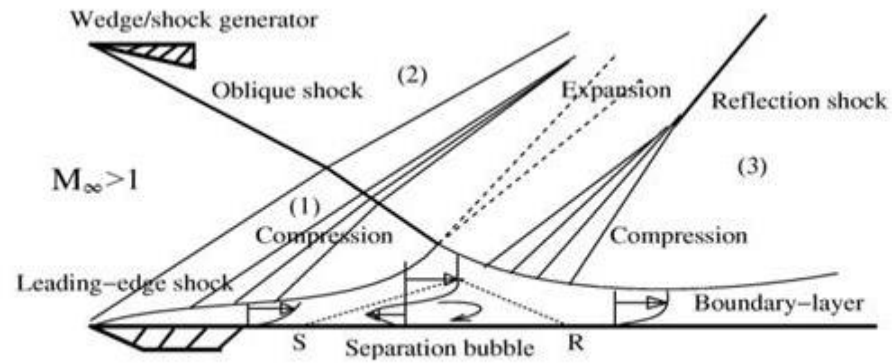
Onde d'urto

Interazione di urti



Onde d'urto

Interazione con lo strato limite



Onde d'urto

Interazione con lo strato limite

