

DAMS

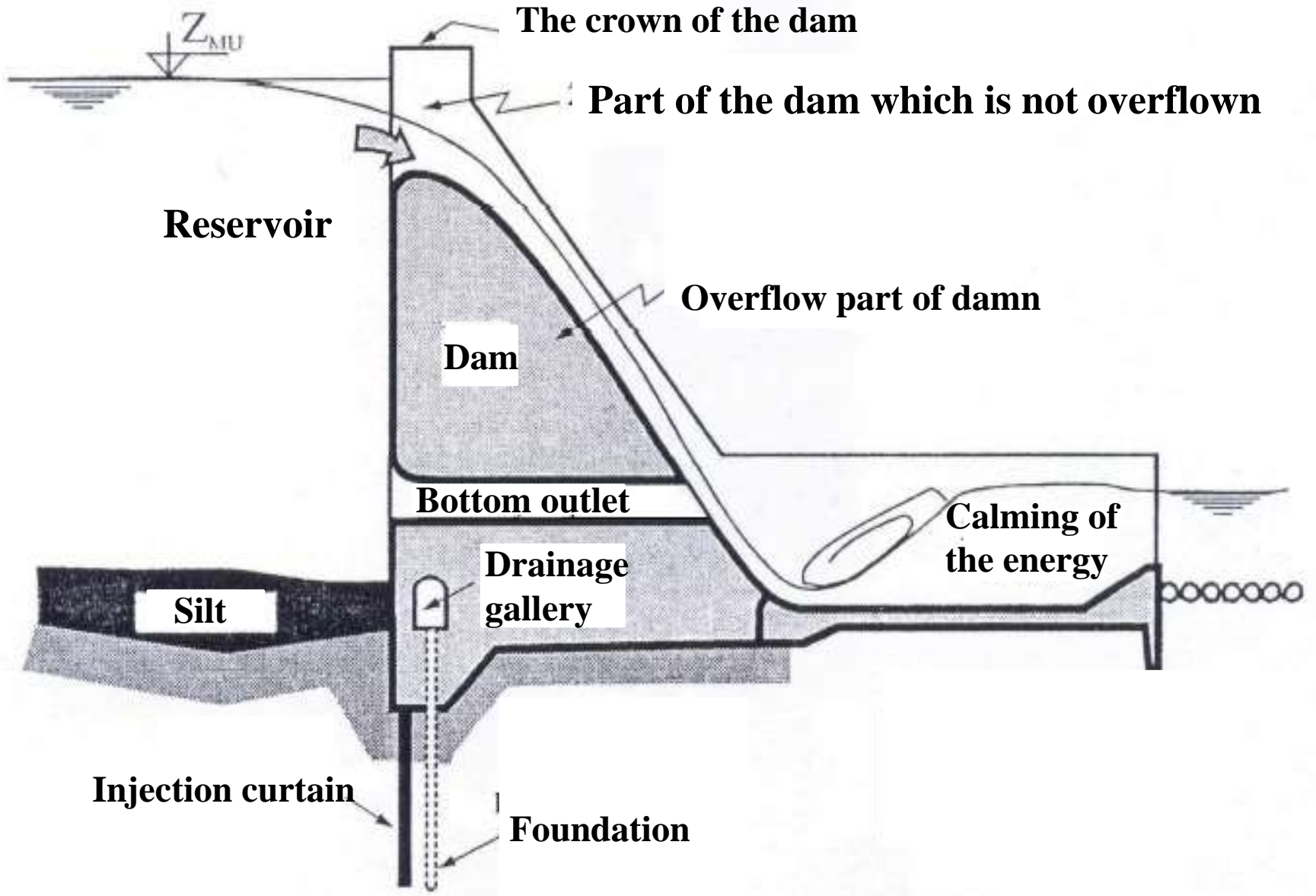
A wide-angle, fisheye photograph of a large dam at night. The dam's spillways are illuminated with a strong blue light, creating a dramatic, monochromatic scene. Water is seen cascading over the spillways, creating white foam and mist. In the background, a long bridge or dam structure stretches across the horizon, also illuminated with blue lights. The overall atmosphere is industrial and powerful.

The oldest
hydraulic
structures





The basic elements of a dam:



Reservoir

The crown of the dam

Part of the dam which is not overflown

Overflow part of damn

Dam

Bottom outlet

Calming of the energy

Silt

Drainage gallery

Injection curtain

Foundation

Types of dams:

compacted earth,
crushed rock and sand

uilt across wider
streams where water
flows rather slowly

EMBANKMENT DAMS

ADVANTAGES:

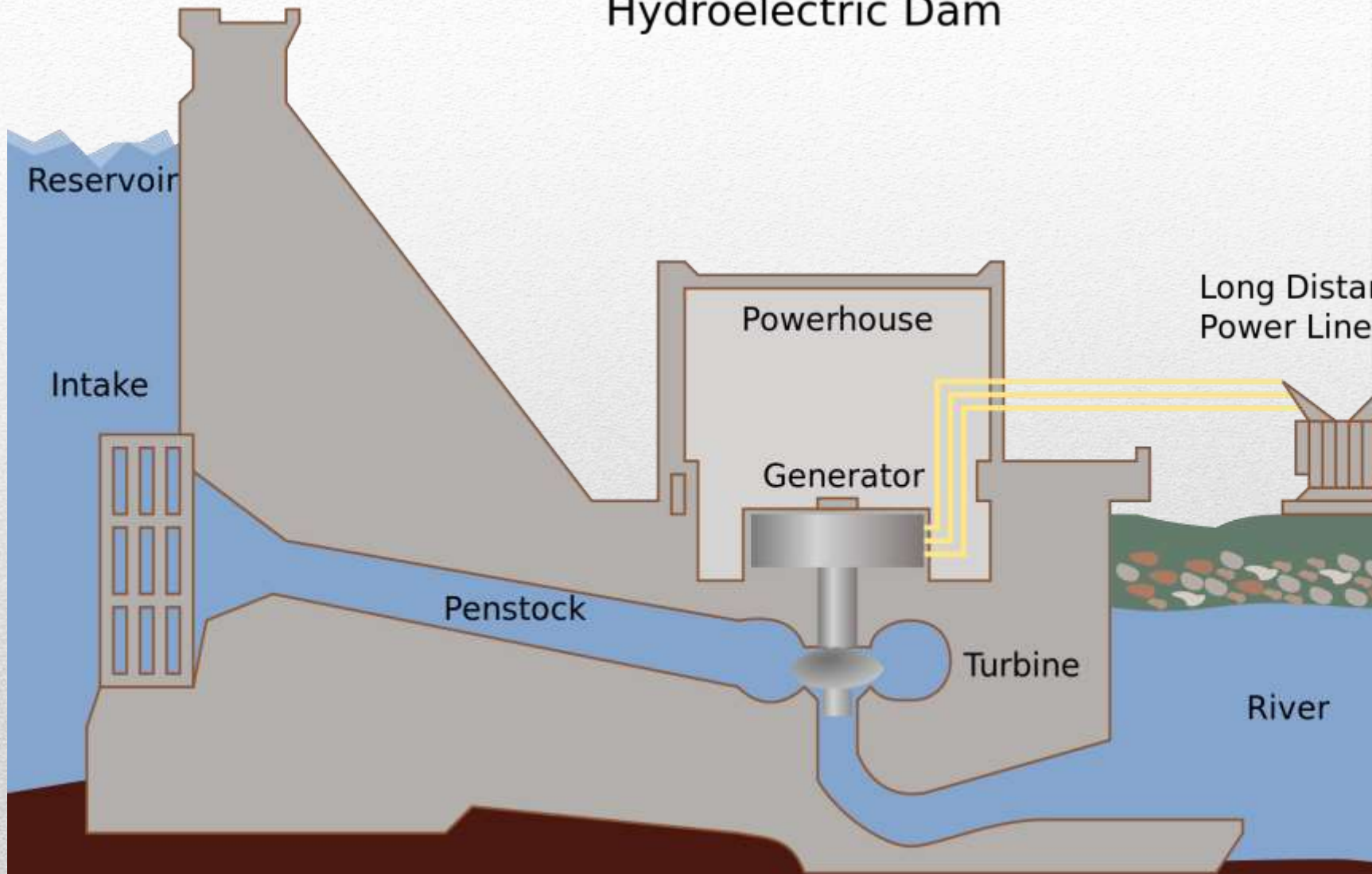
- minimum requirements for foundation conditions
- adaptable to almost all types of terrain
- various materials for embankment
- cheaper and faster building

DISADVANTAGES:

- great sensitivity to overflow
- great sensitivity to uncontrolled seepage and leaking

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Hydroelectric Dam



Nurek Dam



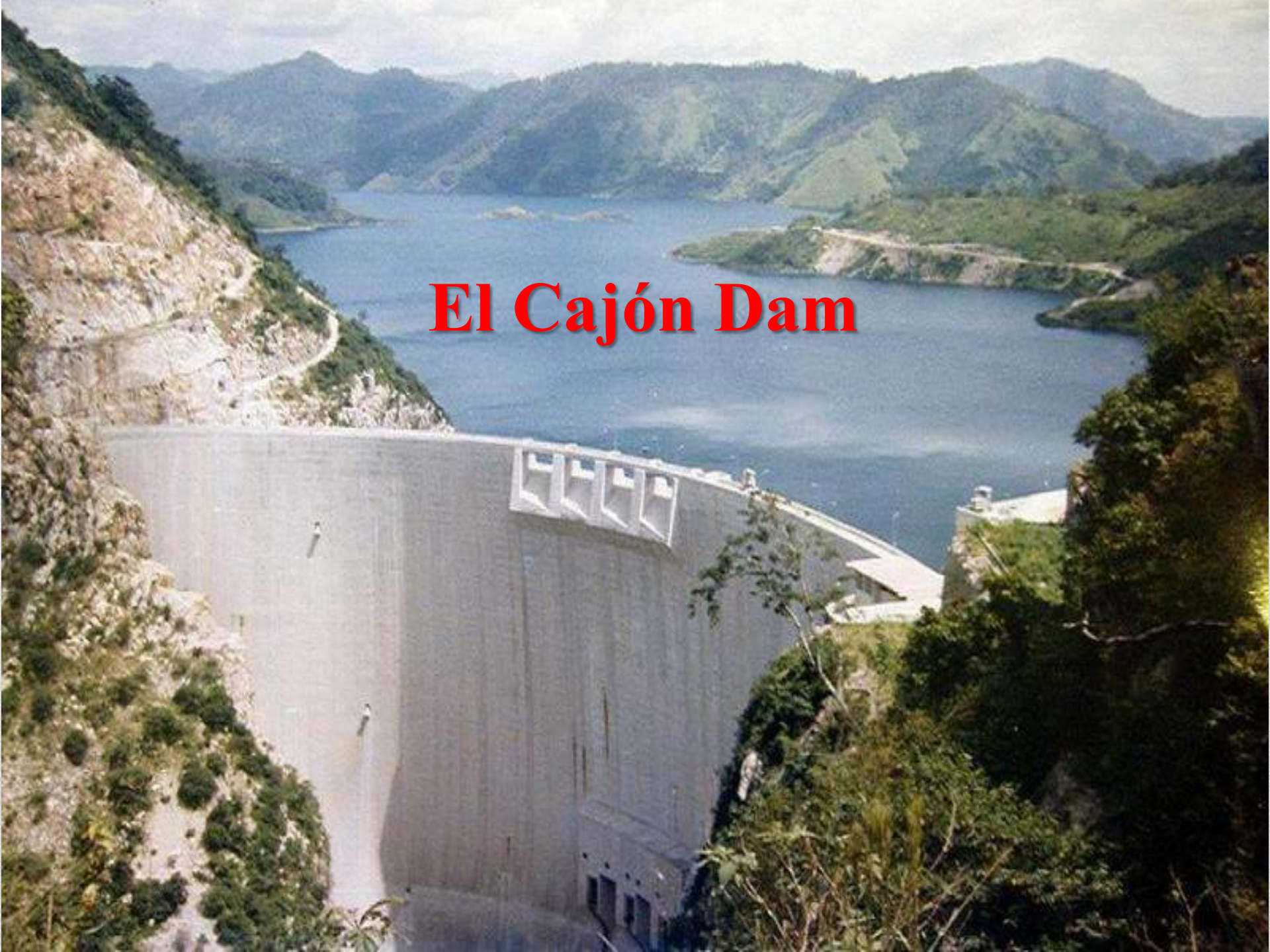


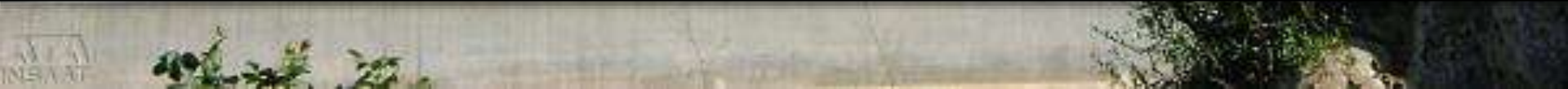


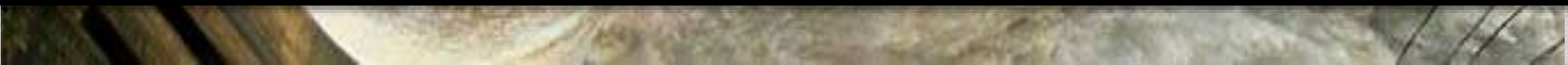
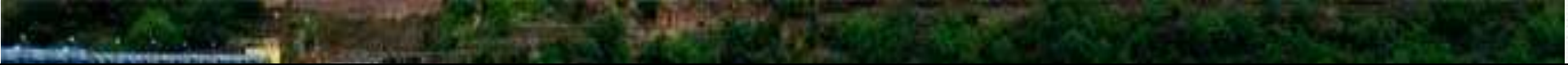




El Cajón Dam







Dams in Croatia



Sklope



Bajer





Varaždin





Words:

- irrigation – navodnjavanje
 - to impound water – akumulirati vodu
 - water-supply system – vodoopskrbni sustav
 - extensive survey – opsežno/detaljno mjerenje
 - to excavate a temporary channel – iskopati privremeni tunel
 - masonry dam – zidana brana
 - embankment – nasip
 - narrow valley – uska dolina
 - compacted earth – čvrsto zbijena/nabijena zemlja
 - crushed rock – drobljeno kamenje
 - velocity – brzina
 - seepage – curenje vode ispod temelja
 - protective features – zaštitne mjere
 - leaking – curenje
 - porous material – porozni/ šupljikav materijal
 - sandstone – pješčenjak
 - to outweigh gains - premašiti prednosti/dobitke
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Literature:

1. "Structures in Time & Space I" ,
Građevinski fakultet Osijek, 2007.
 2. http://www.gradst.hr/Portals/9/PropertyAgent/1167/Files/3039/PREZENTACIJA_3.DIO.pdf
 3. <http://www.enciklopedija.hr/Natuknica.aspx?ID=9238>
 4. <http://hr.wikipedia.org/wiki/Brana>
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