

SCIENCE AND ECONOMY

A brief study of the impact produced by HSSIP Spain during its two week stay

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A large industrial machine, likely a superconducting magnet, is shown in a factory setting. The machine is a large, cylindrical structure with various pipes and cables attached. The background is a blurred industrial environment with overhead lights and structural elements.

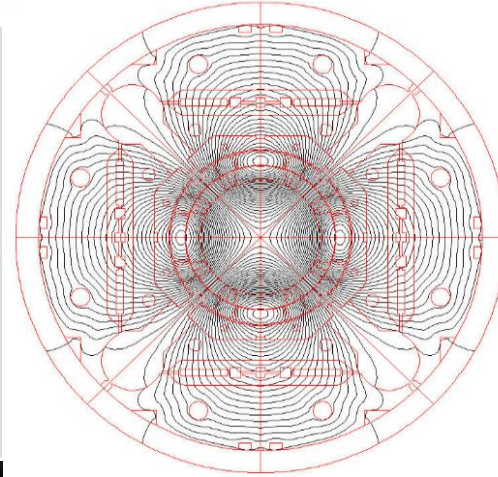
PRODUCTION OF A SUPERCONDUCTIVE MAGNET

Steps to follow



Step 1:

*“Cable manufacturing
at CERN (Nb-Ti ,
Nb₃Sn)”*

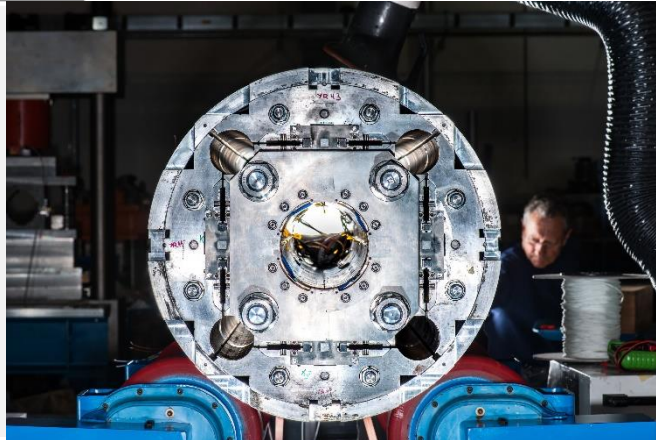


Step 2:

“Magnet design”

Step 3:

*“Magnet
construction”*



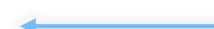
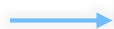
Step 4:

“Magnet Test”



Why should I care?

Health



Tech

“Actions have consequences. Consequences result on socio-economic impacts”

Mille Francs

||

Un classisiz 1807-1873

1000 Banque Nationale Suisse

1000 Mille Francs

Socio-Economic Impacts at CERN

1000

Le président du Conseil

Un membre de la Direction générale

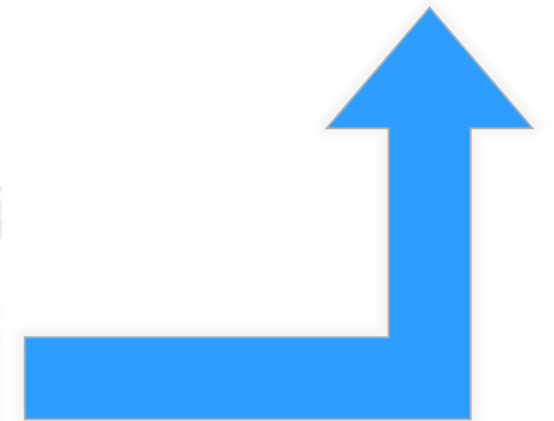


TYPES OF IMPACTS

- Economic impact: Economic outcome produced by an announcement, action or a policy.
- Social Impact: Outcome of a specific action on a community.

Ej. A megacorporation settles on a city in which a part of the inhabitants is hired in order to work for them.

Salaries



Quality of life

“WTP” vs “VALUE OF TIME”

	<u>Willingness To Pay</u>	<u>Value of Time</u>
Definition	Desire of paying for a good/service of a person.	Value of time used by a person to make an action.
Data	Population's opinion	Data compilation
Methodology	Survey	Data analyse stablishing a monetarian value for the time.

OUR ECONOMIC IMPACT

Methodology: Survey → Data analyse → Conclusions

- ❑ CERN arrival (Aeroplane + Transport to Madrid) = $5675.28 + 4634.08$ (*round trip*) = 10,309.36 CHF
- ❑ Hotel = $(77*11 + 58*4)*14 = 15,106$ CHF
- ❑ Food = $(12*2 + 36*12)*26 = 11,856$ CHF
- ❑ Transport = $35*26 = 910$ CHF
- ❑ Leisure (Souvenirs, Extras, Fondue, Cocktail) = $3,515 + 1,300 + 1,739 + 900 = 7,454$ CHF

❑ TOTAL = 45,635.36 CHF

OUR SOCIAL IMPACT

Methodology: Data analyse → Conclusions

Visits' Value of Time	Instagram's Value of Time																																				
<p>6 global visits (SC, SM18, Data Center, ALICE, S'cool Lab, ISOLDE)</p> <ul style="list-style-type: none"> ➤ Time Spent = 490' = 8h + 10' ➤ €/min = 0.13 ➤ N° visitors = 26 <p>→ VALUE OF TIME = $26 \cdot 490 \cdot 0.13 = 1,656.2 \text{ €} = 1,807.58 \text{ CHF}$</p>	<table border="1" data-bbox="1302 534 2435 648"> <tr> <td>Javi</td> <td>Claudio</td> <td>Dani</td> <td>Natalia</td> <td>Elsa</td> <td>Teresa</td> <td>Rocio</td> <td>Starfd</td> <td>Luis</td> <td>Bea</td> <td>Nerea</td> <td>2 sem.</td> </tr> <tr> <td>0</td> <td>0</td> <td>4</td> <td>0</td> <td>0</td> <td>2</td> <td>0</td> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td></td> </tr> <tr> <td>1</td> <td>2</td> <td>0</td> <td>3</td> <td>72</td> <td>44</td> <td>19</td> <td>4</td> <td>3</td> <td>4</td> <td>3</td> <td>162</td> </tr> </table> <ul style="list-style-type: none"> ➤ Media min/persona = 10 min. ➤ €/min = 0.13 <p>→ VALUE OF TIME = $162 \cdot 10 \cdot 0.13 = 210.6 \text{ €} = 229.85 \text{ CHF}$</p> <p style="text-align: right;"><i>*Pedro Duque's Tweet</i></p>	Javi	Claudio	Dani	Natalia	Elsa	Teresa	Rocio	Starfd	Luis	Bea	Nerea	2 sem.	0	0	4	0	0	2	0	1	0	0	0		1	2	0	3	72	44	19	4	3	4	3	162
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*“CERN... a finite research
infrastructure, an infinite
infrastructure of social and economic
benefits”*

