

DARKSIDE-20K



- Bersaglio: 50 t di UAr; in totale ne servono 120t

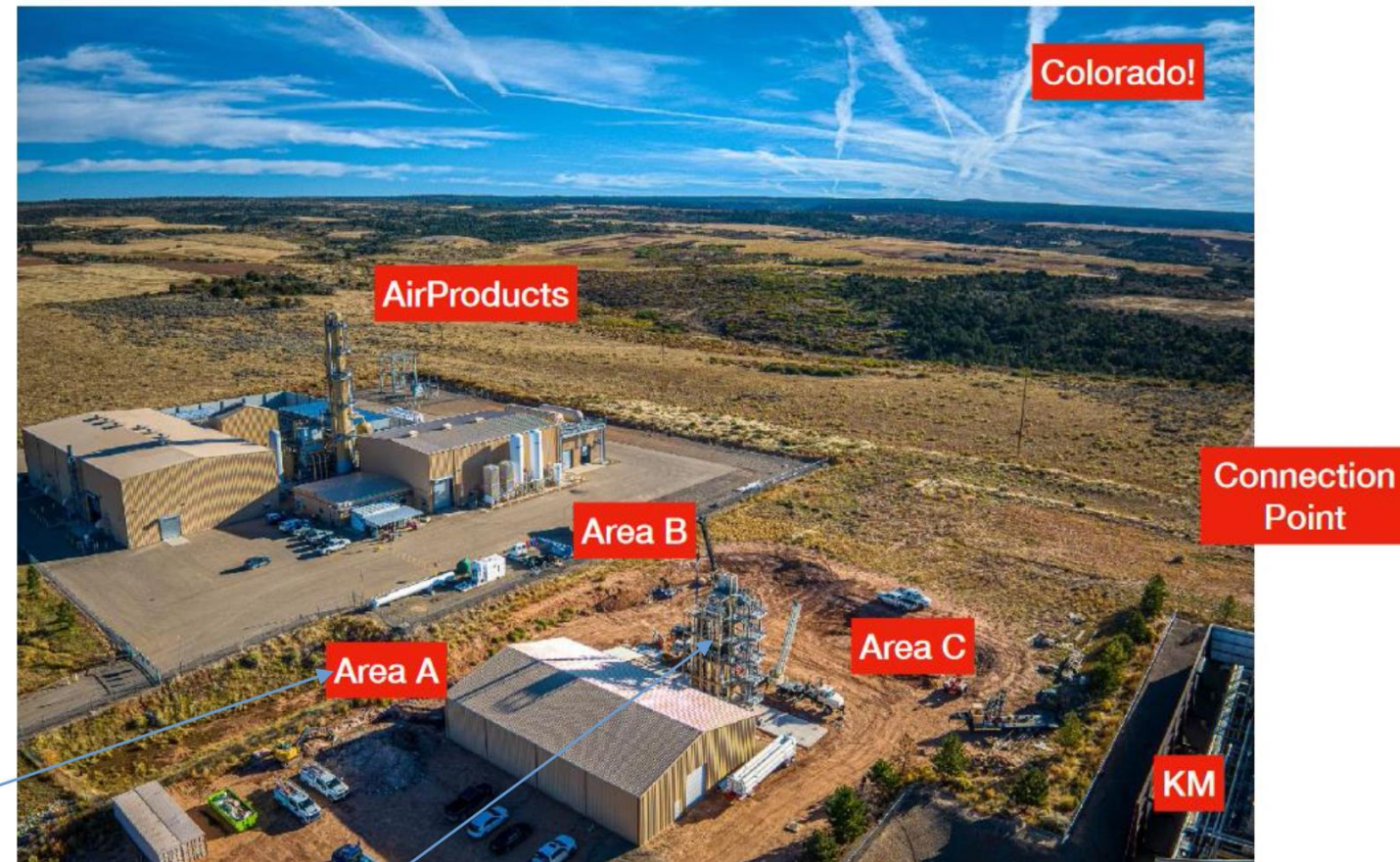
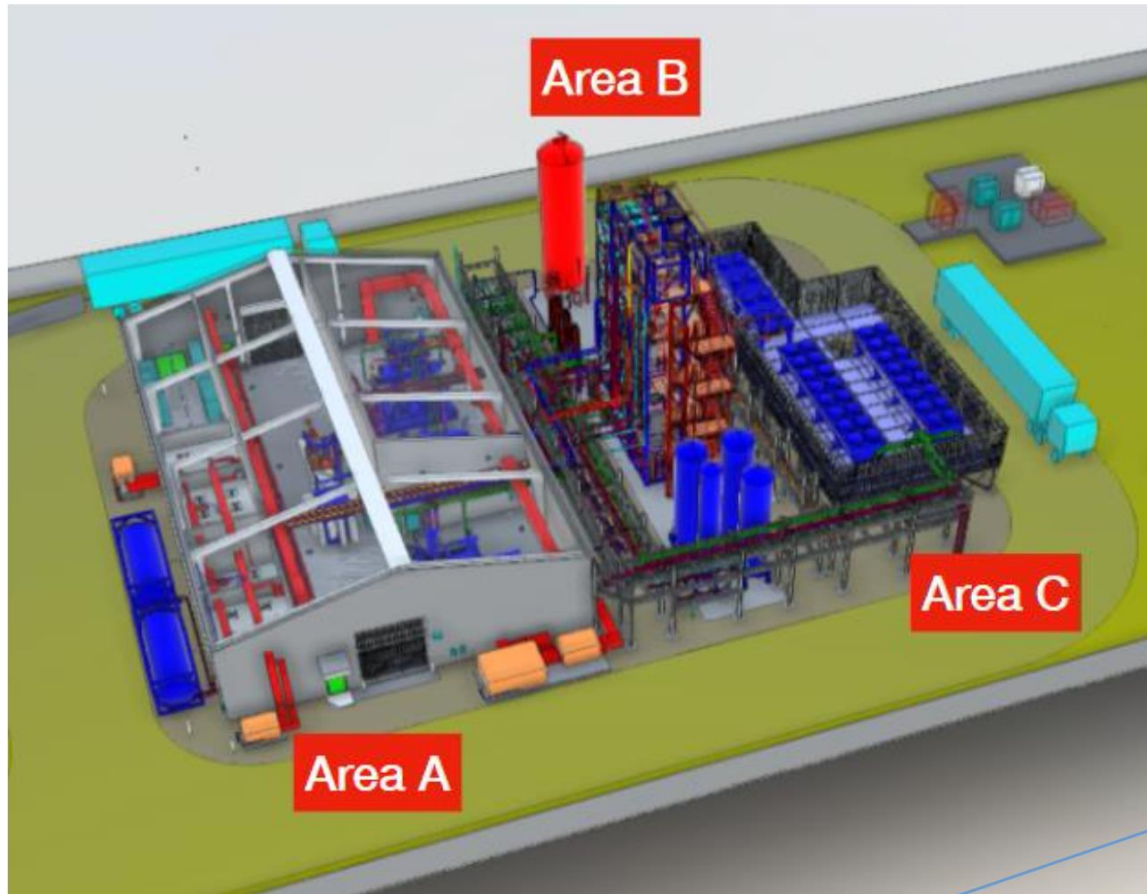
IL PERCORSO DELL'UAR



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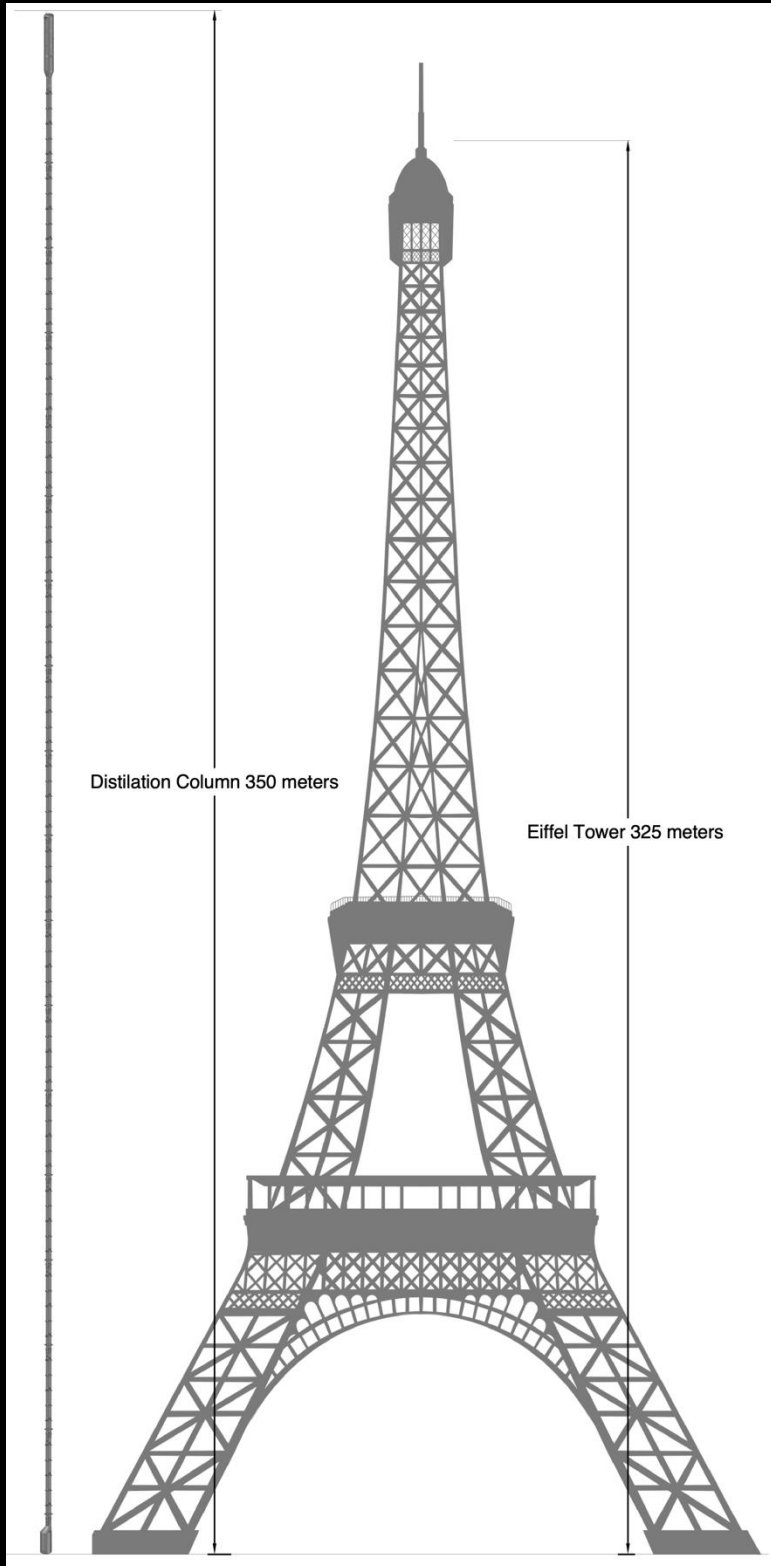
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URANIA: UN NUOVO IMPIANTO AD ELEVATA PRODUZIONE



- INFN/NSF/CFI/PNNL

IL PROGETTO ARIA

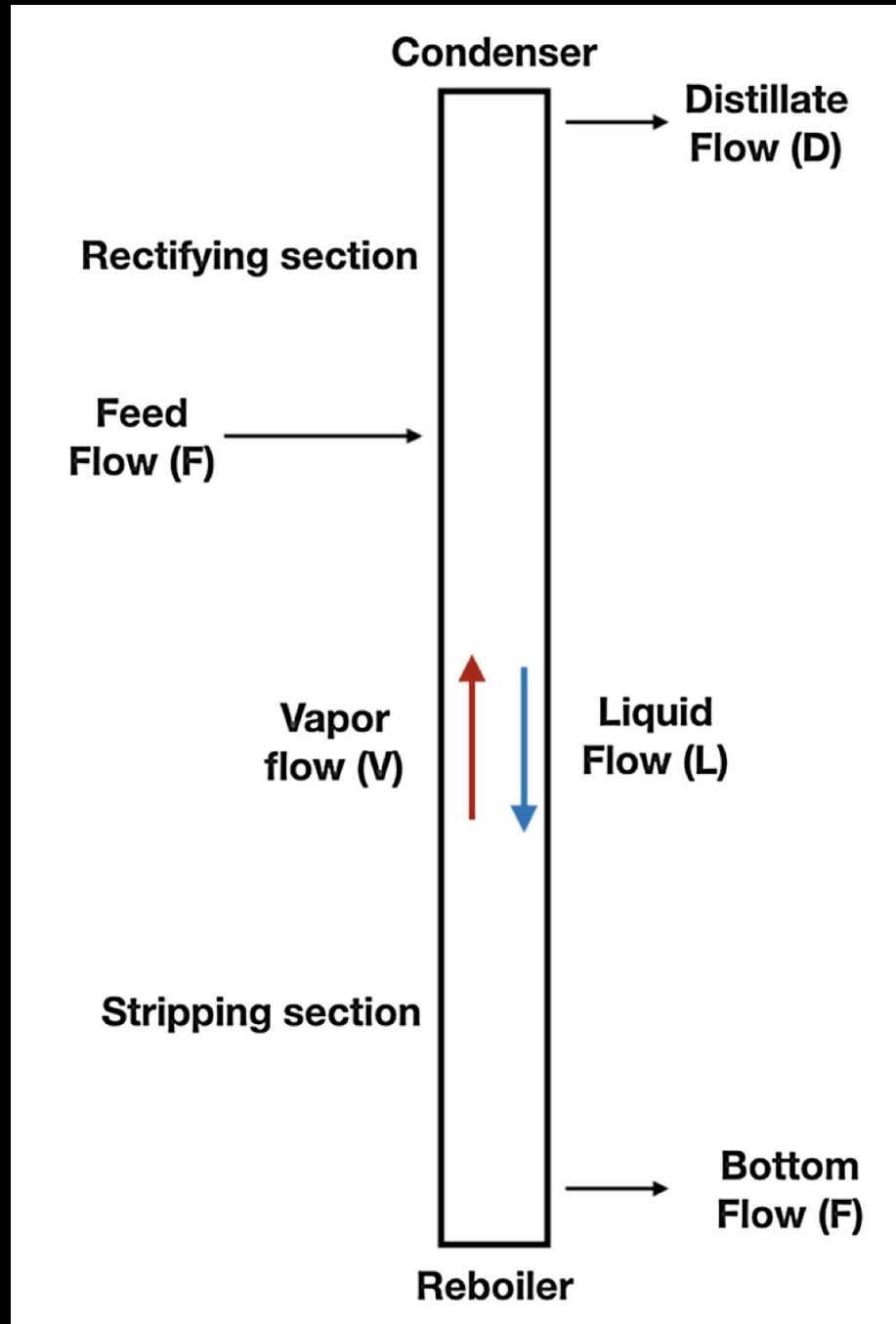


**DISTILLAZIONE ISOTOPICA:
DIFFERENZA DI VOLATILITA'
PICCOLISSIMA —>**

**MOLTISSIMI STADI DI
DISTILLAZIONE**

**TEMPERATURE DI EBOLLIZIONE
MOLTO BASSE —>IMPIANTO
CRIOGENICO**

LA STRUTTURA DELLA COLONNA



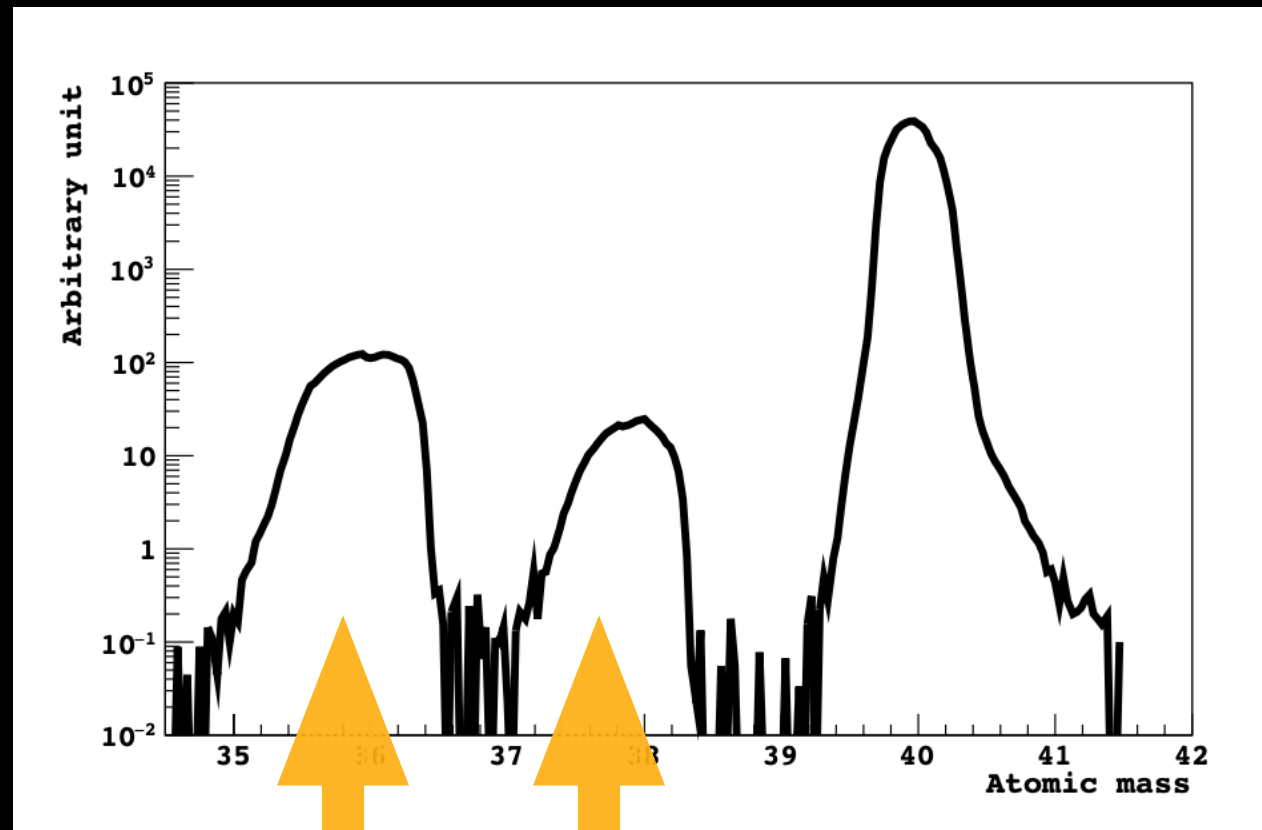
MODULI PRONTI IN SARDEGNA



COLONNA PROTOTIPO



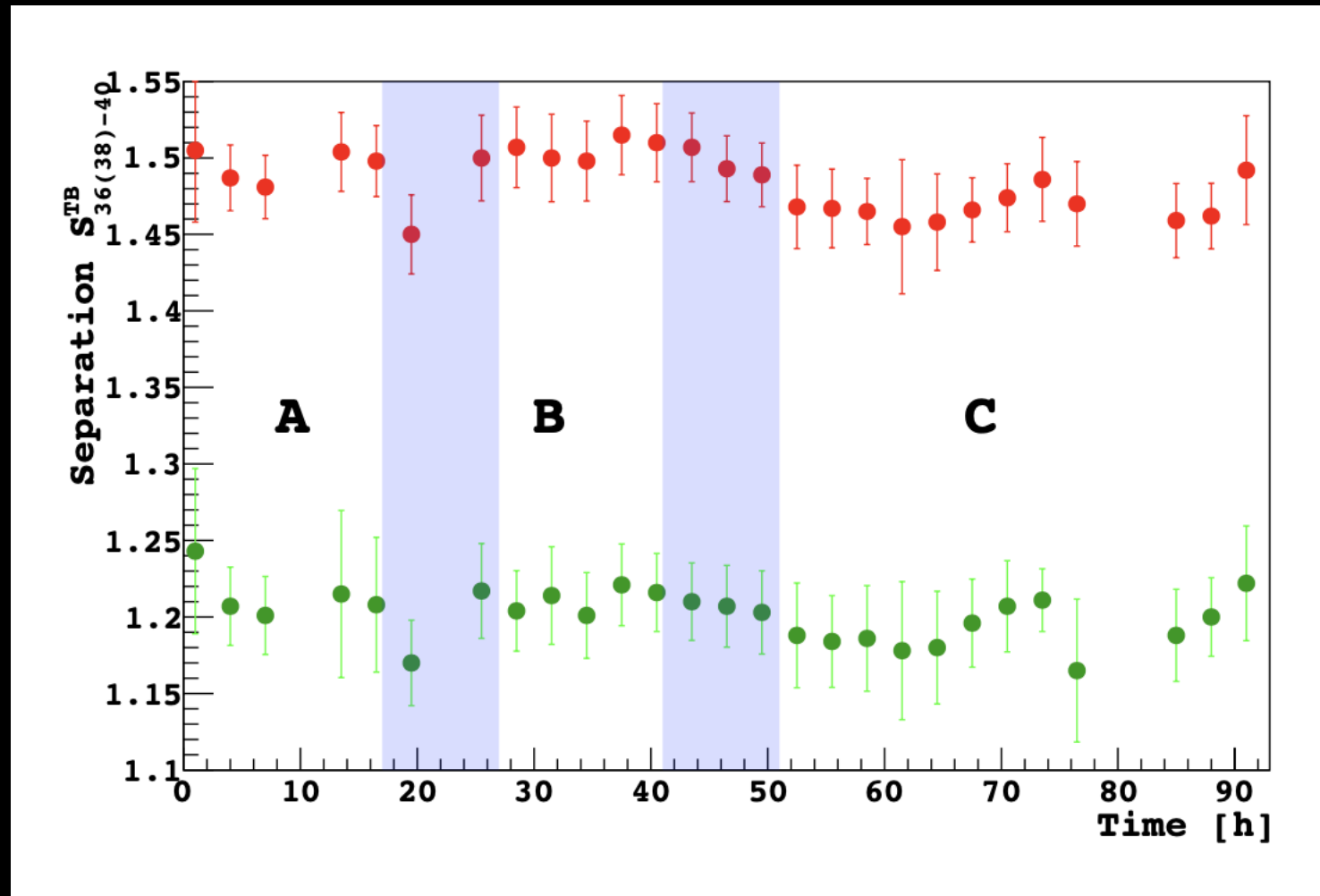
ISOTOPI STABILI ARGON



^{36}Ar
0.33%

^{38}Ar
0.063%

SEPARAZIONE



$$S_{36-40} = S_{T-B} = \frac{\begin{pmatrix} x_{36} \\ x_{40} \end{pmatrix}_T}{\begin{pmatrix} x_{36} \\ x_{40} \end{pmatrix}_B}$$

- La tecnologia funziona!

POLO PER LA
PRODUZIONE
DI ISOTOPI
STABILI




RICERCA
DI BASE



RICERCA
BIOCHIMICA

START-UP'S



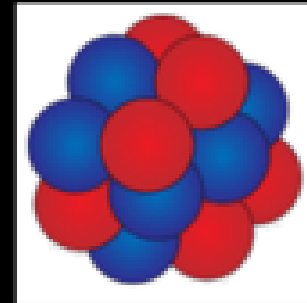
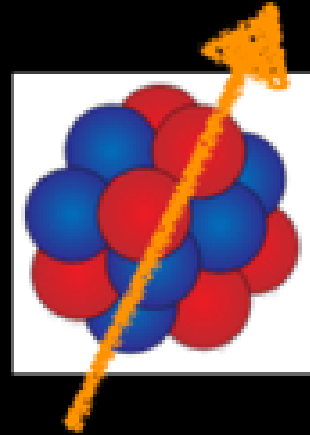
SINTESI IN-SITU DI
MOLECOLE
MARCATE PER
INDAGINI
METABOLICHE

^{13}C

^{15}N

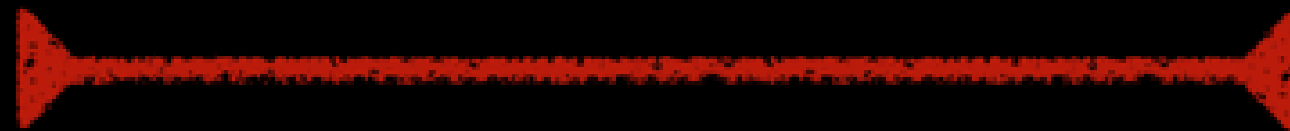
^{17}O

^{18}O



Risonanza
Magnetica

Positron
Emission
Tomography



~€1B