Introduction: purpose of the meeting and EU-funding statu

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Astroparticle Physics for Europe

The ASPERA road map proces

Astroparticle Physics for Europe

- **Phase I** → → →
- **Phase II:**
  - *timelines &*
  - *priorities for each WG*
- **Phase III:**
  - *overall priorities (2008 – 2009)*

Today: concluding Phase II

TOD

- **Reports 7 working groups:**
  - **science case**
  - **most important projects**
  - **required budget profile**
- **Questionnaires to agencies:**
  - **funding mechanisms**
  - **present APP funding (k€)**
  - **present manpower (FTE)**
- **Questionnaires to projects:**
  - **status, funding**
  - **timelines, costs**

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Questionnaires to agencies - I

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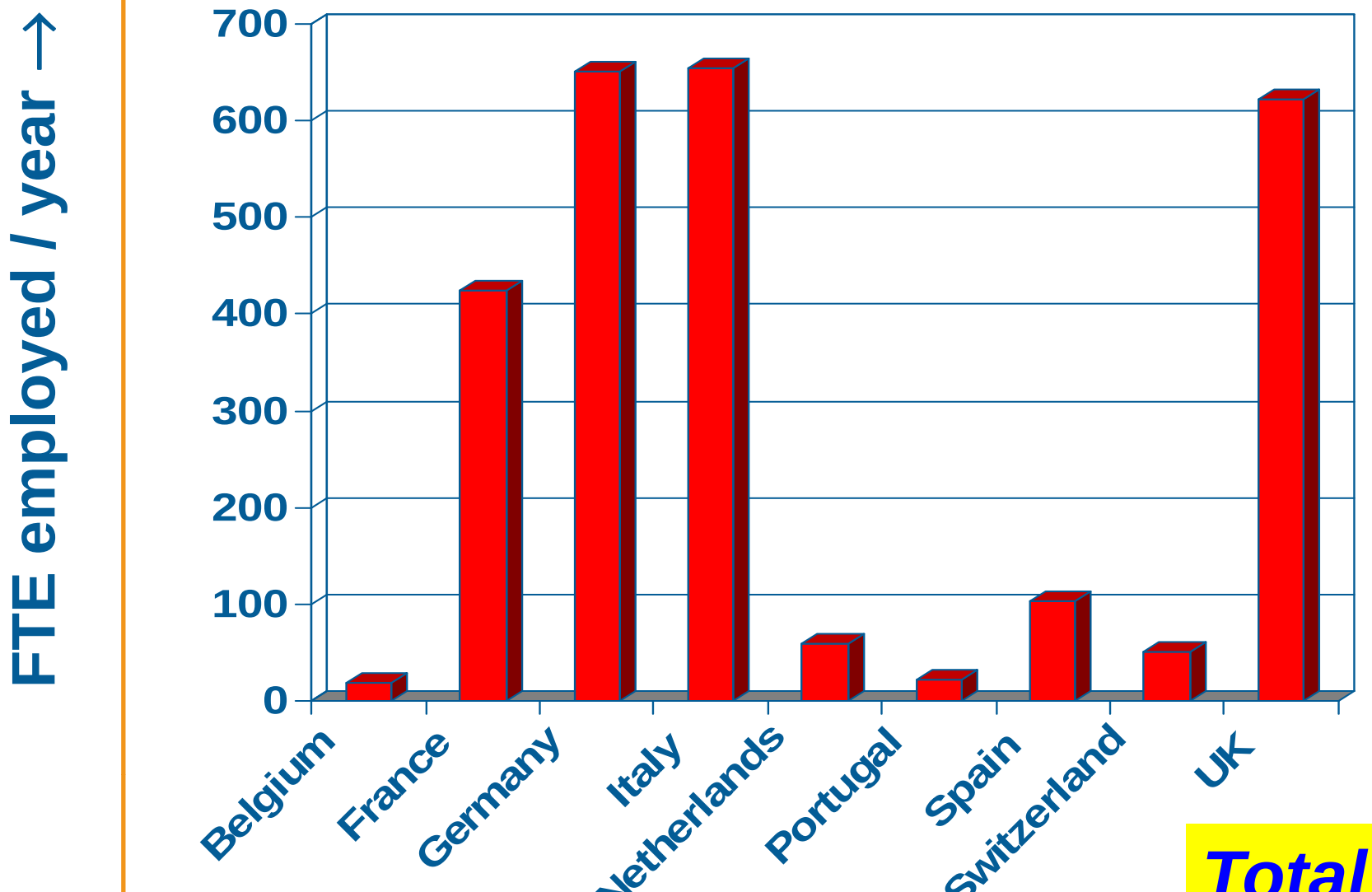
- **APP personnel in 2006**



Total #FT

Questionnaires to agencies - I

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- **Caveats:**
  - **not all forms submitted**
  - **analysis just started**
- **Funding in 2006 (k€):**
  - **materials: ~70 M€**
    (i.e. 700 M€ in 10 yrs)
  - **personnel: ~ 150 M€**
- **Goals:**
  - **set boundary conditions**
  - **identify possible obstacles**

WG3: high-energy cosmic ray

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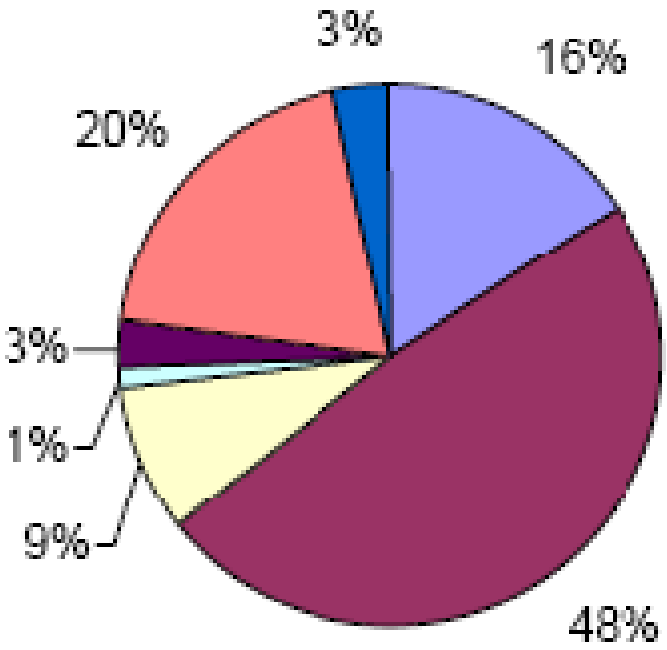
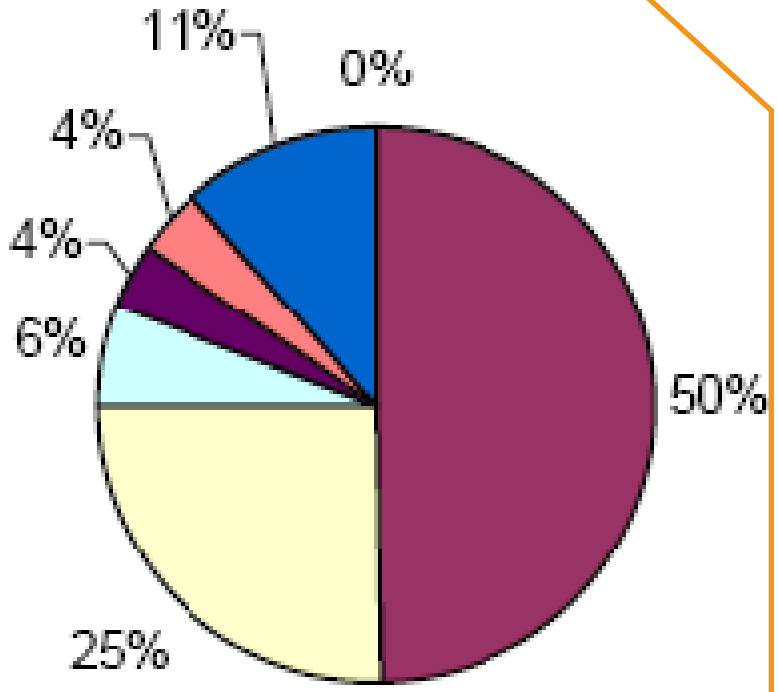
- **New resources '08 – '18**



Investments k€



FTE

- Project 1: Auger (south)
- Project 2: Auger (north)
- Project 3: AMS-02
- Project 4: LOFAR
- Project 6: JEM-EUSO
- Project 5: Super-EUSO
- Project 7: NUCLEON

WG3: high-energy cosmic ray

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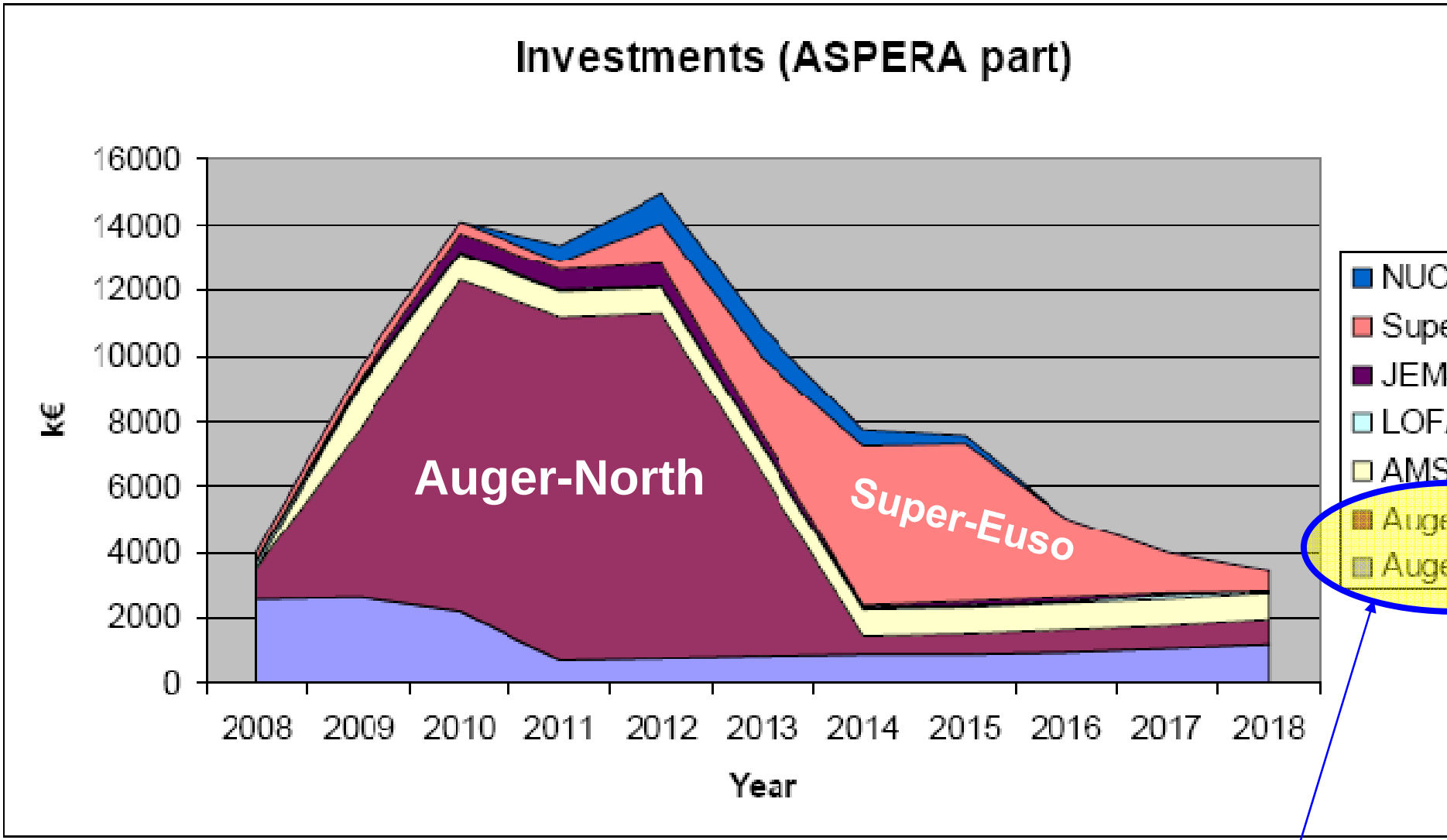
- **Required investments**



WG3: high-energy cosmic ray

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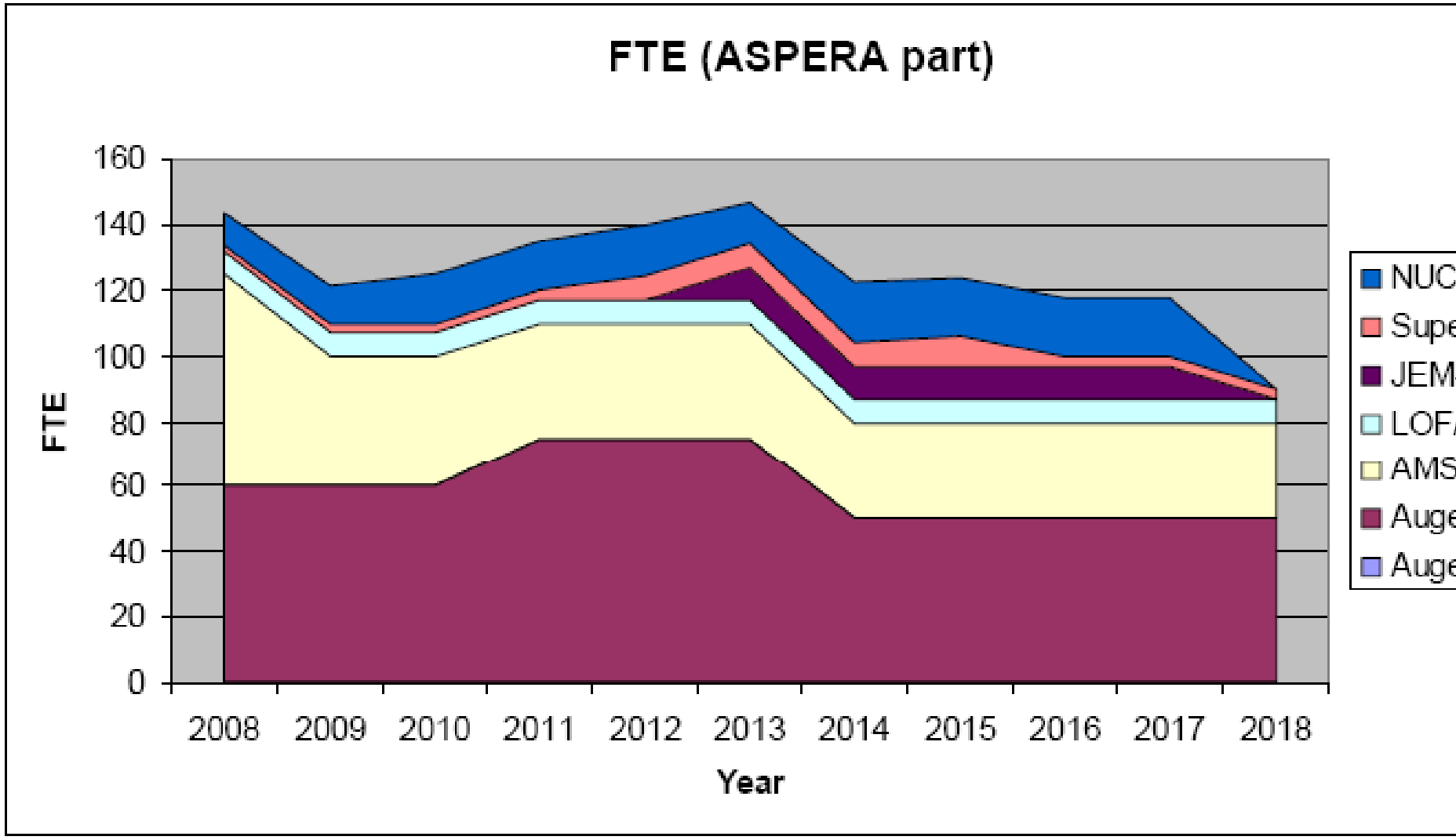
- **Required manpower**



Some more examples…

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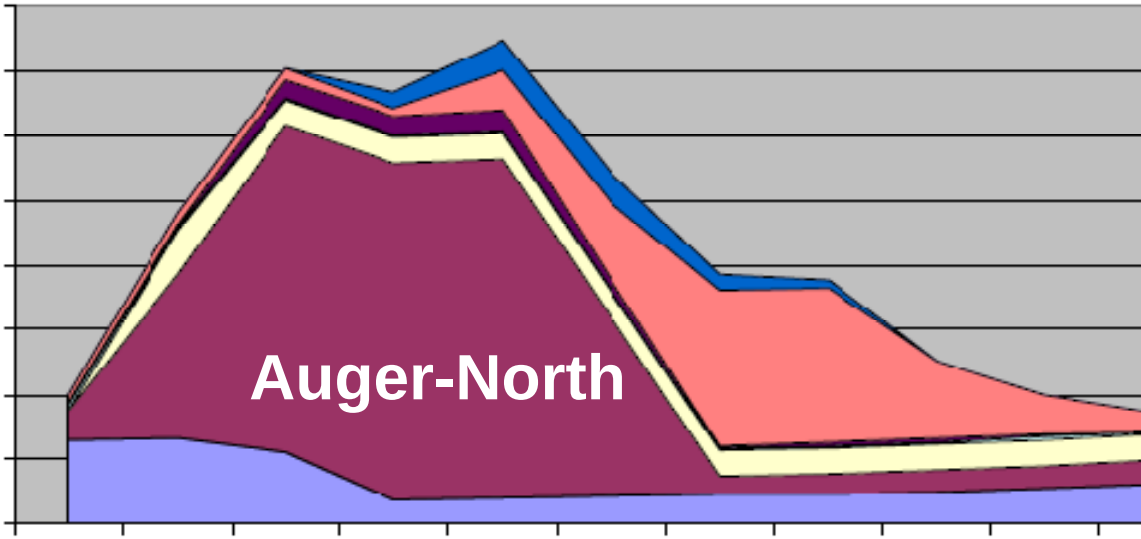
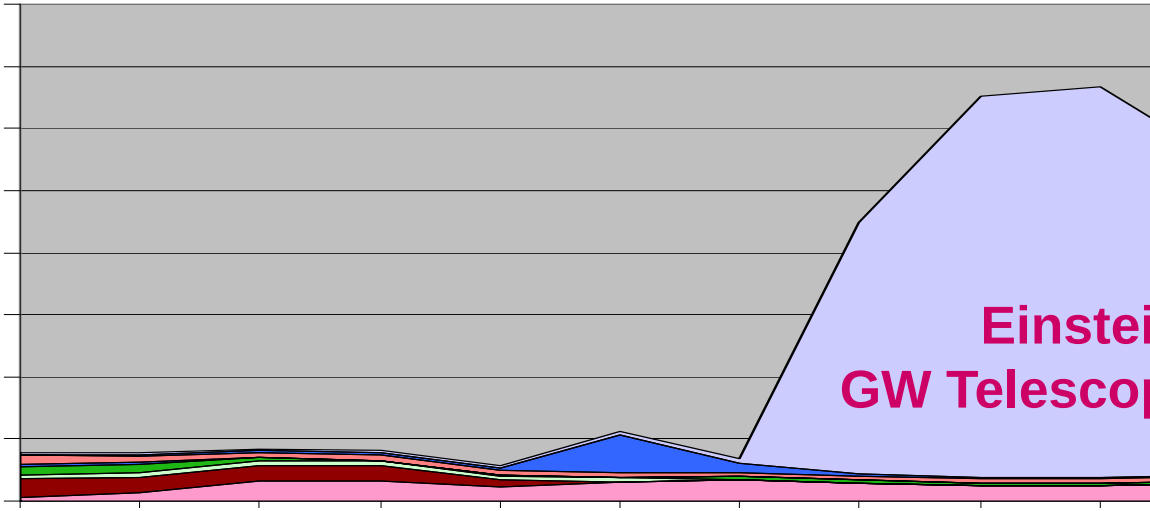
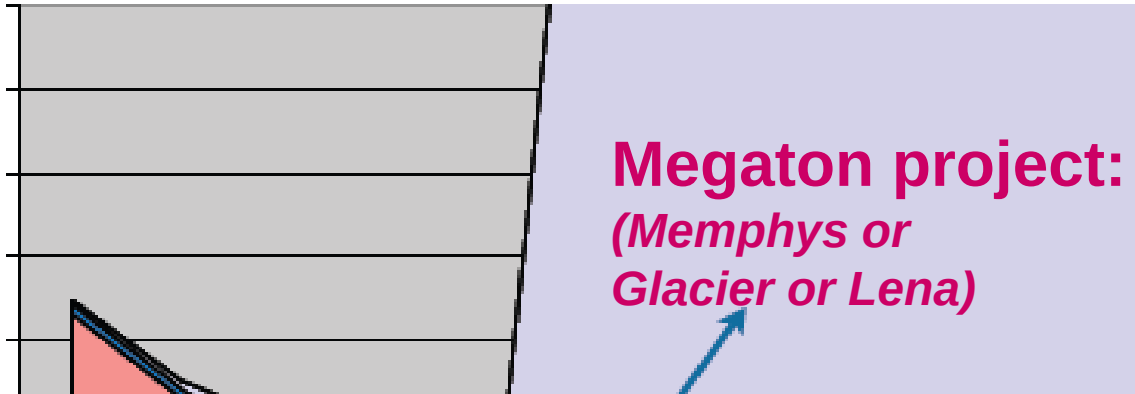
- **WG3:**



- **WG6:**



- **WG7:**



The APP ambitions

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- **Key projects:**

WG1	*High-Energy γ telescope (CTA)*	100 M€		’10 – ‘
WG2	*1-ton underground detector ($\delta m_\nu \sim 20$ meV)*	100 M€		’12 – ‘
WG3	*Auger-North high-energy air shower array*	45,7 M€	655 FTE	’09 – ‘
WG4	*KM3NeT (deep-sea high-energy ν-telescope)*	230 M€	640 FTE	’10 – ‘
WG5	*DM direct search (Noble Gas and/or Cryogenic)*	150 M€		’11 – ‘
WG6	*Einstein Telescope (GW-laser interferomet.)*	430 M€	690 FTE	’15 – ‘
WG7	*Megaton (p-decay det. &*			

Conclusions

- **Astroparticle physics in EU:**
  - **High ambition level**
  - **Present investment level**
    700 M€ in 10 years
  - **Required resources:**
    1,400 M€ in ’08 – ’18
- **Timing differences:**
  - **next 5 years:**
    Auger-North, CTA, KM3NeT,..
  - **after 2013:**