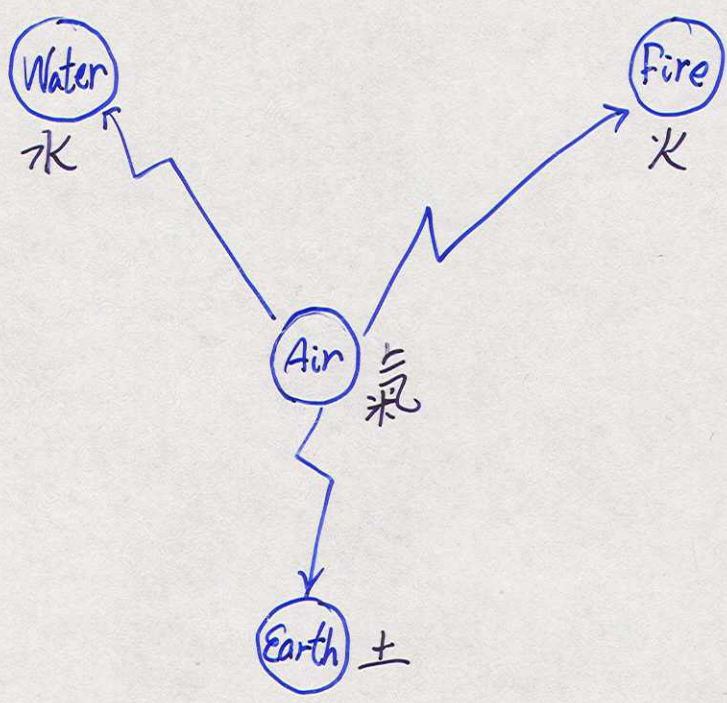


A Preview of
Particle Physics

김충선 (金忠善)

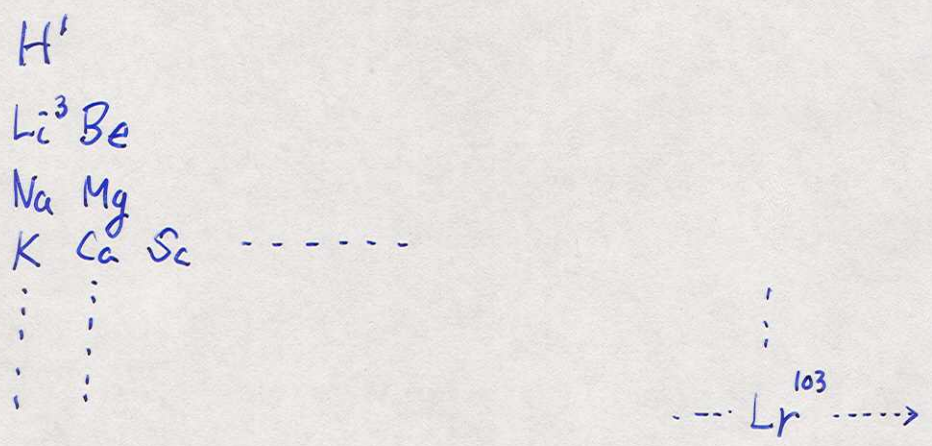
What is the World Made of?

Who are present-day particle physicists?



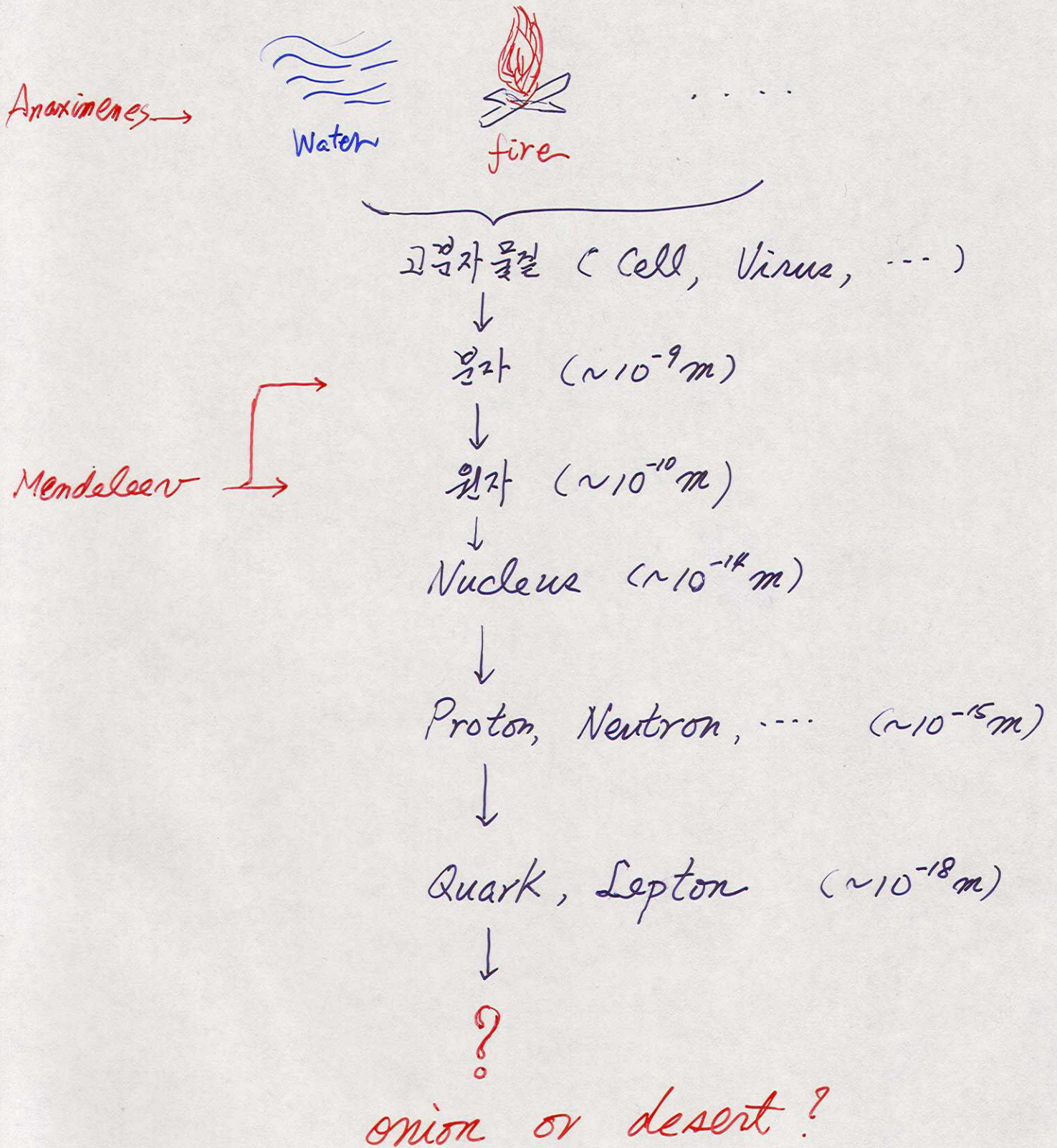
Original version of Anaximenes of Miletus' theory.

25 centuries later by Mendeleev:

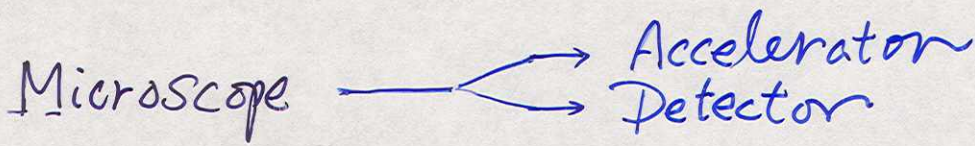


Anaximenes' model is clearly conceptually superior
(∵ simplicity and economy), but wrong!

Mendeleev's answer is right, but too complicated!



How observe Particles : Experimentalist's point of View.



spatial resolution $\sim \Delta x \sim \frac{hc}{E}$ (Uncertainty principle)

$$= \frac{(6.6 \times 10^{-16} \text{ eV} \cdot \text{sec}) \cdot (3 \times 10^8 \text{ m/sec})}{E \text{ (eV)}}$$

$$\sim \frac{1}{E} \cdot (10^{-7}) \text{ meter.}$$

