

EDU

ADVACAM

Imaging the Unseen



# RADIOACTIVE EXPERIMENTS FOR SCHOOLS

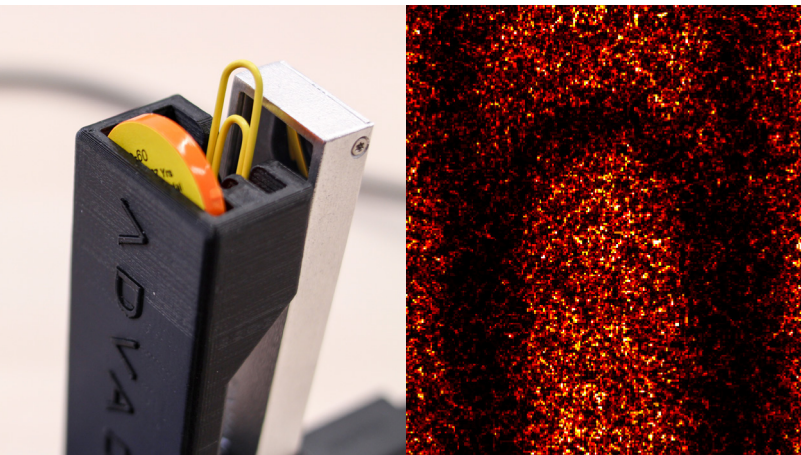
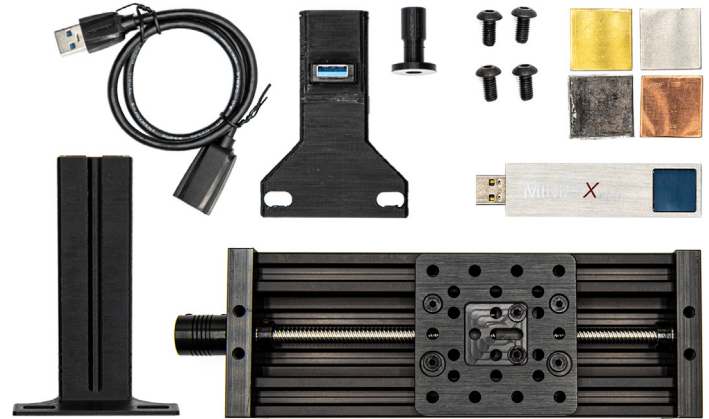
Bringing particle physics to life in the classroom



# Education Kit

## Revolutionizing nuclear education with NASA-approved technology

ADVACAM's Radiation Education Kit provides all the necessary equipment to conduct unique experiments right in the classroom.

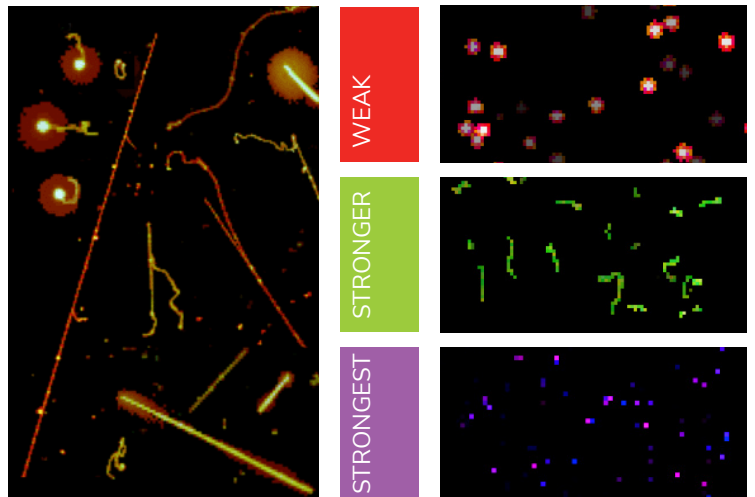


## A creative playground

Students can prepare their own radioactive source and construct shielding against its radiation. They can observe how different radiation types interact with matter and check the laws of radioactive decay.

## Discover individual particles

- $\alpha$  particle is helium nuclei without an electron shell. Its track appears as larger dot.
- $\beta$  particle is an electron generated during radioactive decay. Its track appears as a zigzagging worm.
- $\gamma$  particles are photons of invisible light. They leave tiny dots on the detector.



# Education Applications

## Engaging Lessons

The Kit and ADVACAM's MiniPIX EDU detector allow students to experience hands-on particle interactions, making complex concepts more accessible and engaging.

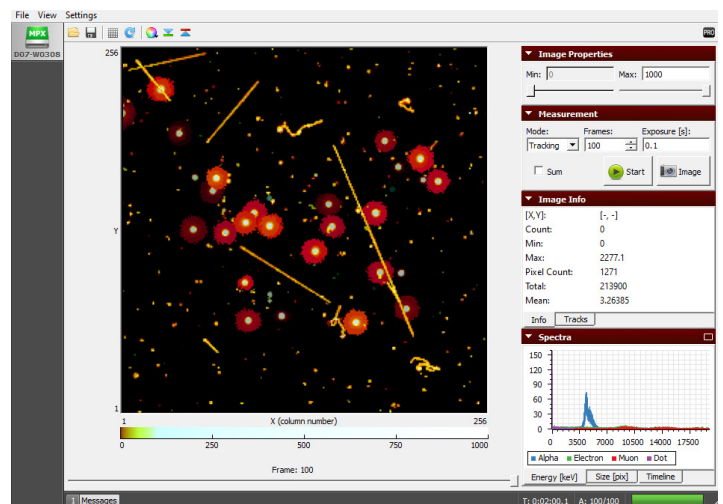


## Interactive Experiments

Students can visualize the radioactivity of common objects and materials on their screens. They can explore the variation of air radioactivity during the day, hunt for cosmic muons, or see how altitude affects radiation types.

## Free PIXet Basic Software

Each MiniPIX EDU comes with a free version of our data-processing software PIXet Basic. It enables users to configure the detector, as well as visualize and analyze data obtained from the device.



## SUITABLE PRODUCTS FOR EDUCATION



### MiniPIX EDU

Sensor Resolution:	256 x 256
Readout Chip:	Timepix
Max. Frame Rate:	45 fps
Pixel Pitch:	55 $\mu$ m
Dimensions:	89 x 21 x 10 mm
Weight:	30 g

MiniPIX EDU is a miniaturized USB camera developed by ADVACAM. It is designed and priced with its educational purpose in mind. NASA uses the same technology to monitor space radiation and protect astronauts. Students can now use the same type of detector to discover the laws of particle physics.

### EDU Kit

**We also offer a complementary set that helps with conducting simple experiments including particle tracking or radiography.**

The kit brings the latest CERN technology to the classroom. It consists of a radiation camera, and accessories to help students better understand nuclear and particle physics. Radioisotope sources can be ordered separately from a third party company.

