

## **Presentation of a new Amateur X-Ray Spectrometer 'XRS'**

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During the ERAC03 symposium last year in Heppenheim, Peter Wright sent two complete salvaged photo-scintillation devices to me to play with. I then designed a low cost X-ray spectrometer based on a cheap RISC processor, ATMEL ATmega16. Since we don't know yet on which frequency our friends may call from outer space, it might make sense also to observe terribly high frequencies at wavelengths of nanometers, Angstroms or even less. The hardware aspects will be presented, especially how to measure the very short (in time) Cherenkov-light pulses produced from the scintillation crystal. I will also give some tips how to supply the PM-tube to get enough stable results. Some preliminary results and hopefully the hardware will be presented. (The electronics is finished but the box to fit all circuit boards and the power supply are still missing).