

**SPEAKER:** Ihor Tymchuk

**TITLE:** High Energy Physics tracking detector modules based on aluminium-polyimide adhesiveless dielectrics and SpTAB process

### **ABSTRACT**

Realization of High Energy Physics tracking detector modules based on novel thin silicon sensors and printed circuit boards made of aluminium-polyimide adhesiveless foiled dielectrics using Single point-TAB (SpTab) mounting process allows to get modules with low material budget and reliable interconnections.

Using aluminium-polyimide adhesiveless dielectrics and SpTAB process allow to create direct interconnections from flexible printed circuit to silicon sensor. Such approach allows to get some advantages comparing to copper based printed circuits and wire bonding.

Within recent 20 years Kharkiv team (now LTU Ltd, Ukraine) is working on implementation of aluminium-polyimide adhesiveless dielectrics and SpTAB process in detector modules creation. Obtained results, capabilities, current and further activities will be given.

**SPEAKER:** Maksym Protsenko

**TITLE:** SpTAB process for Space and Terrestrial photovoltaics

### **ABSTRACT**

Solar Arrays is a key part of photovoltaics systems. Reliability and long term operating are defining by chosen method of connection between components of Solar Array.

SpTAB process is not so popular as parallel gap welding method for photovoltaics both for space and terrestrial use. Meanwhile, SpTAB process can be used for photovoltaic solar arrays and some activities in this direction is performed by Kharkiv team (now LTU Ltd, Ukraine). Obtained results on implementation of SpTAB process for space and terrestrial photovoltaics will be given.