



Оптимизация сектора малого BBC

A.V.Tishevsky on behalf of JINR-MEPhI BBC

BBC assembling part

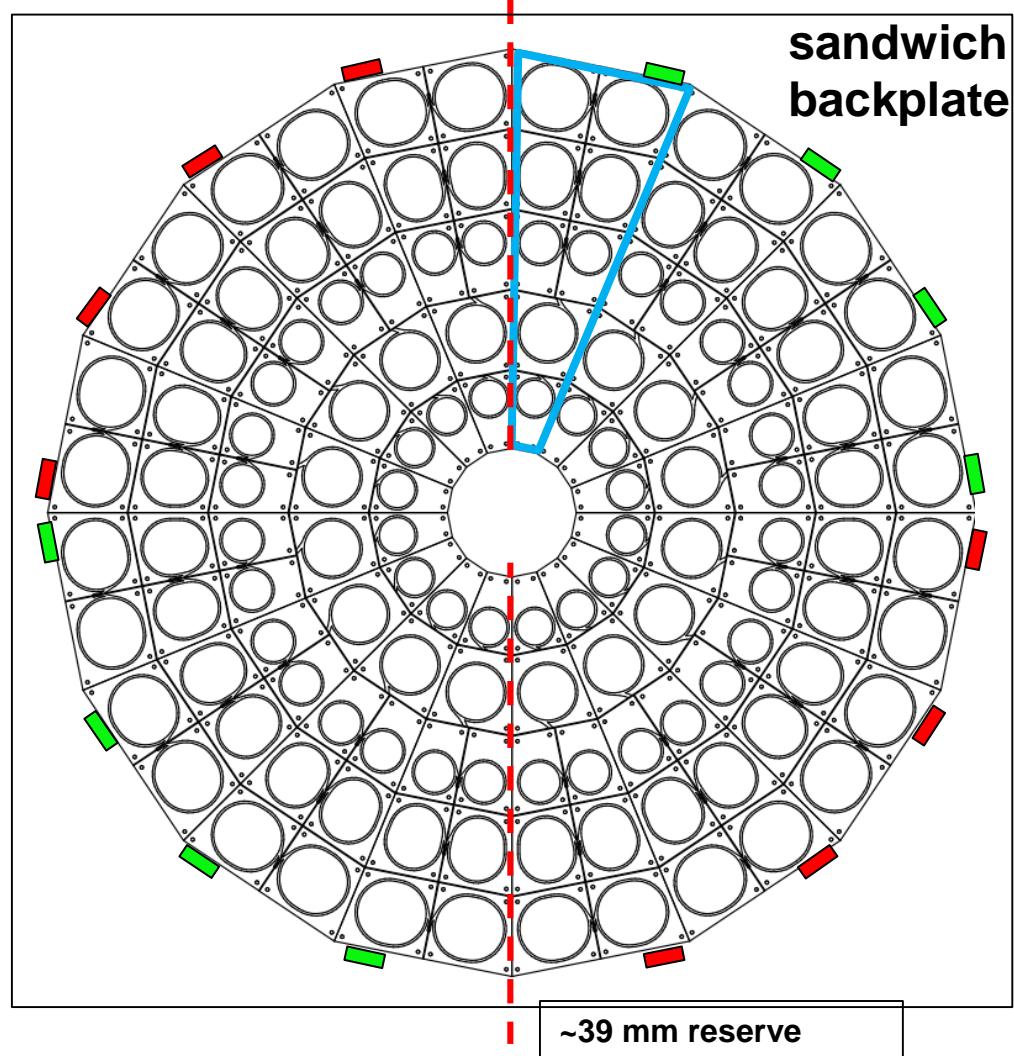
Reduced prototype wheel

Sandwich backplate for BBC

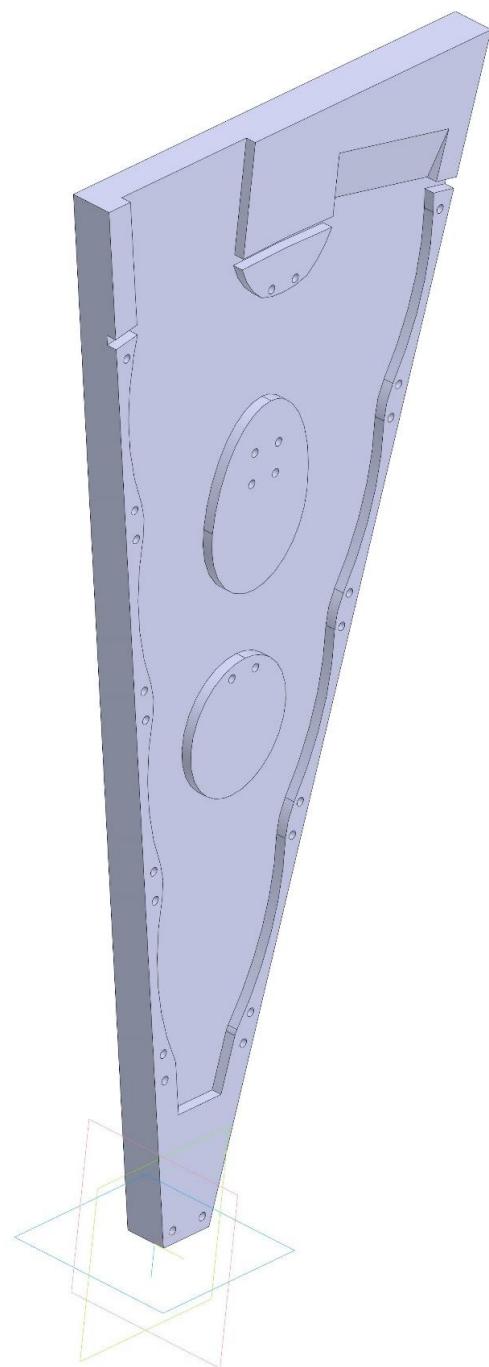
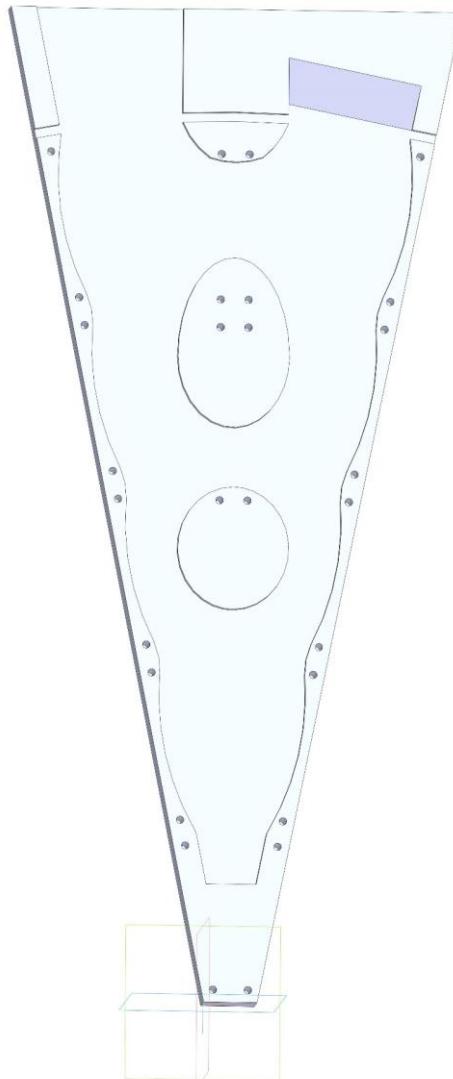


The grooving map is finalizing

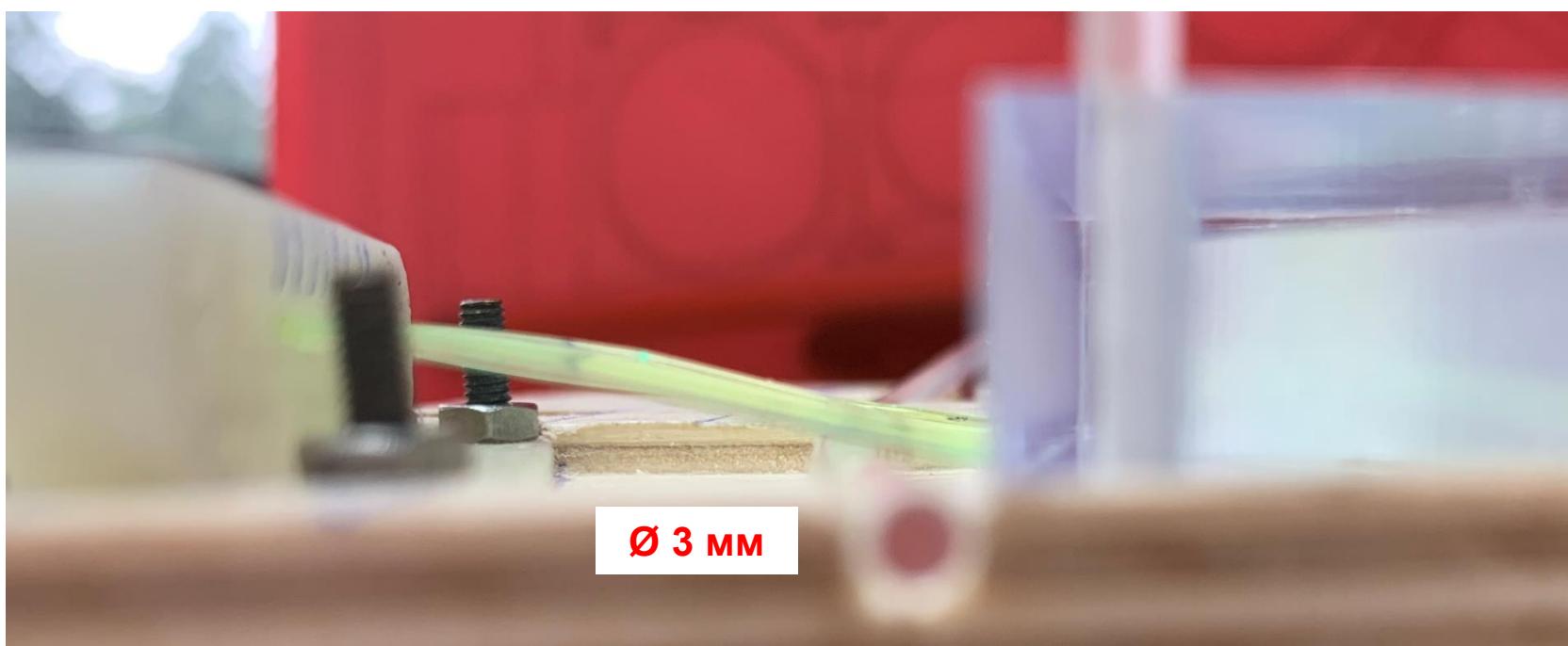
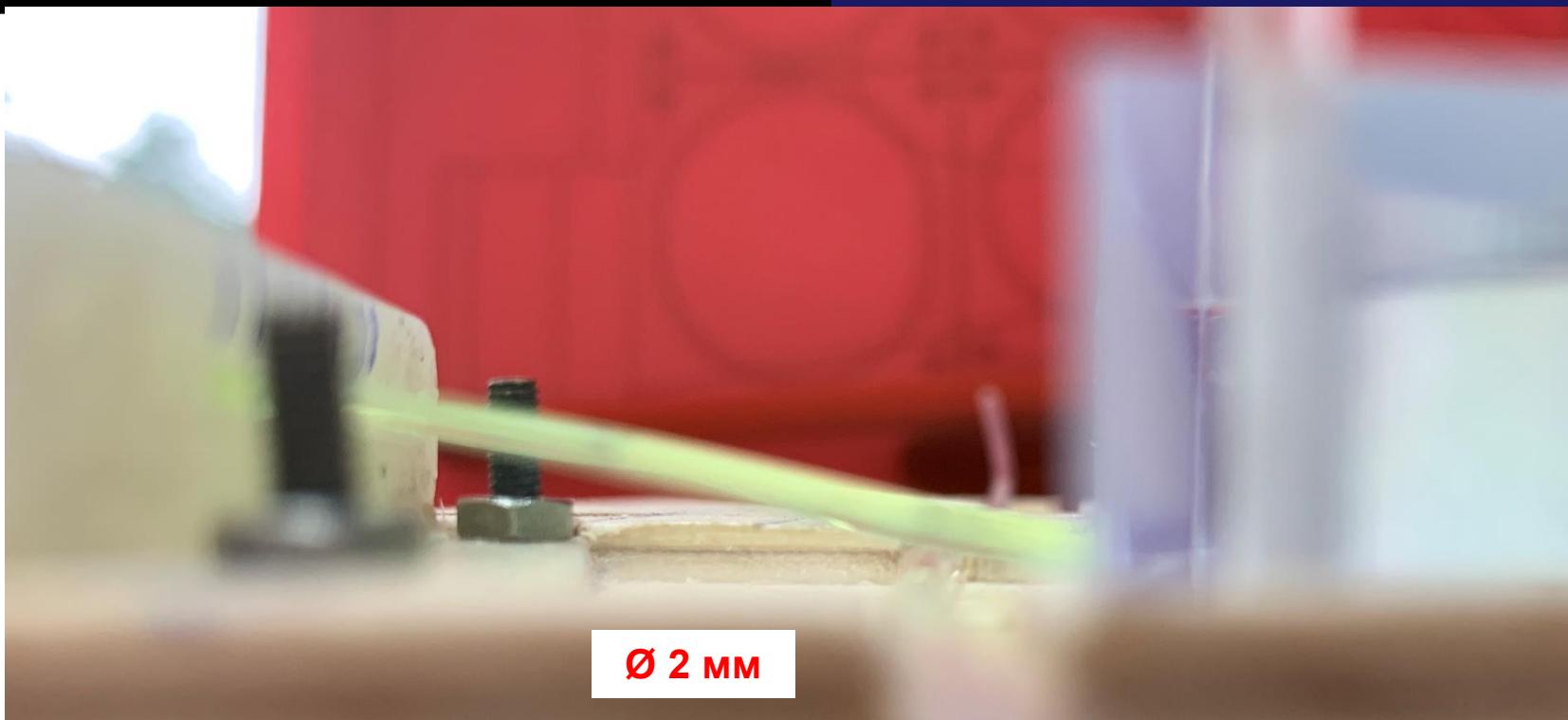
- The next part is to take into account the grooving map, simulate the deformations of the backplate and select its main option.
- After that, the details of the basic mechanical frame will be completed

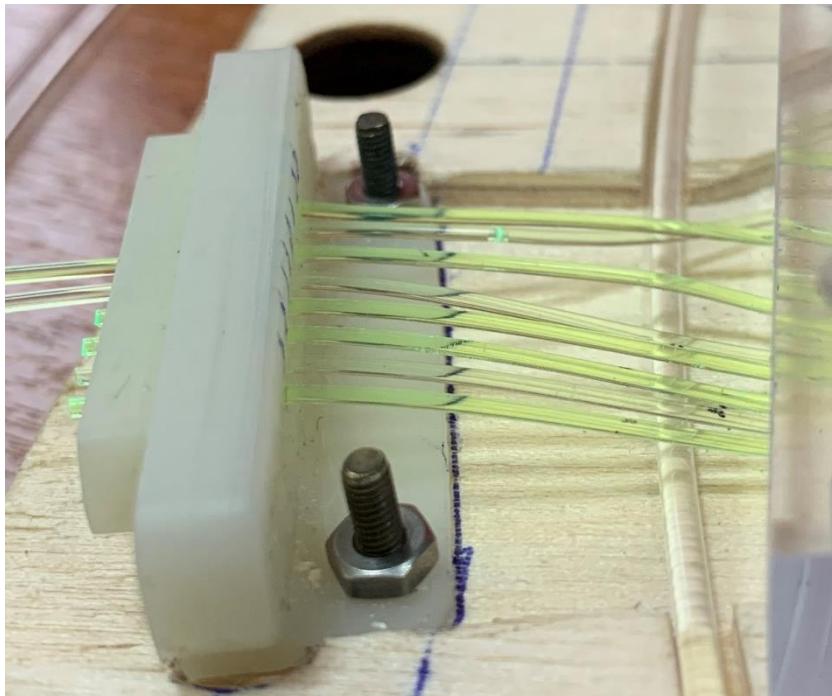


Ver. 4.2
финализация
положения разъёма



Зазор между SGF & WLS

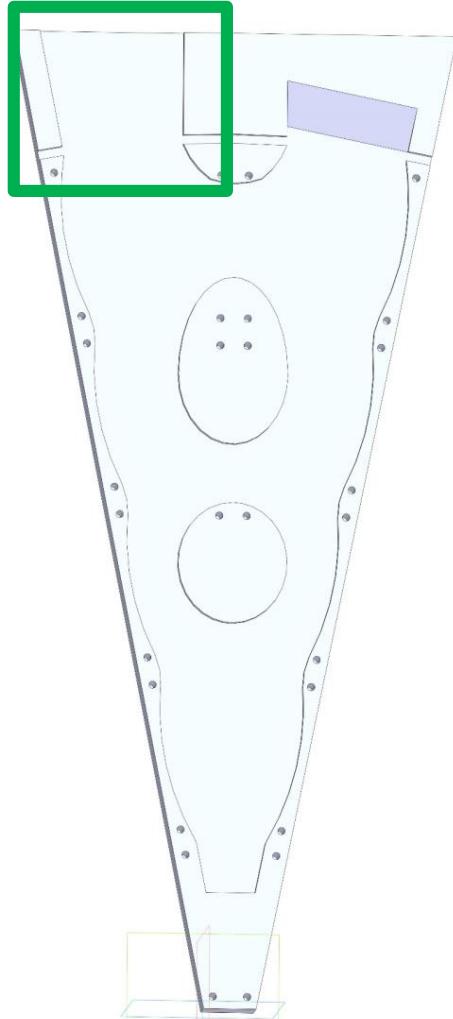




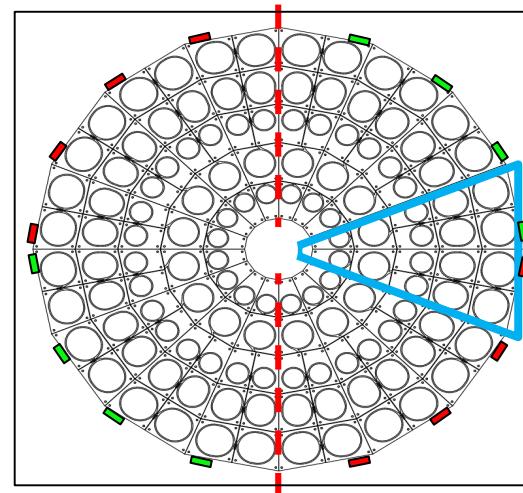


Ver. 4.1

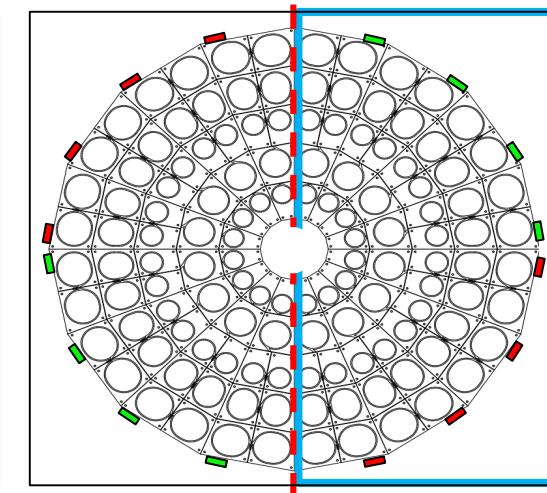
Ver. 4.2
**финализация
положения разъёма**



Ver. 4.3
**прорабатывание
наиболее проблемных
секторов**

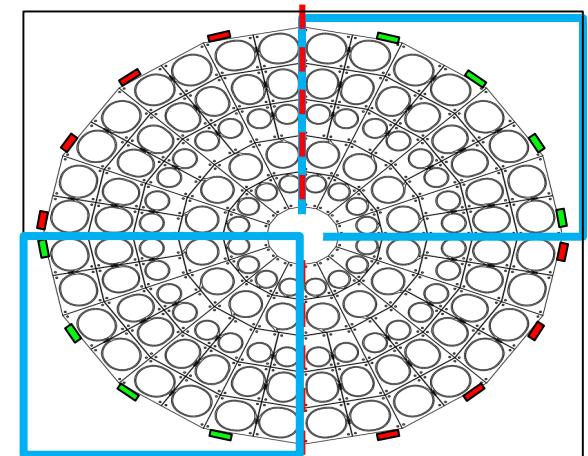
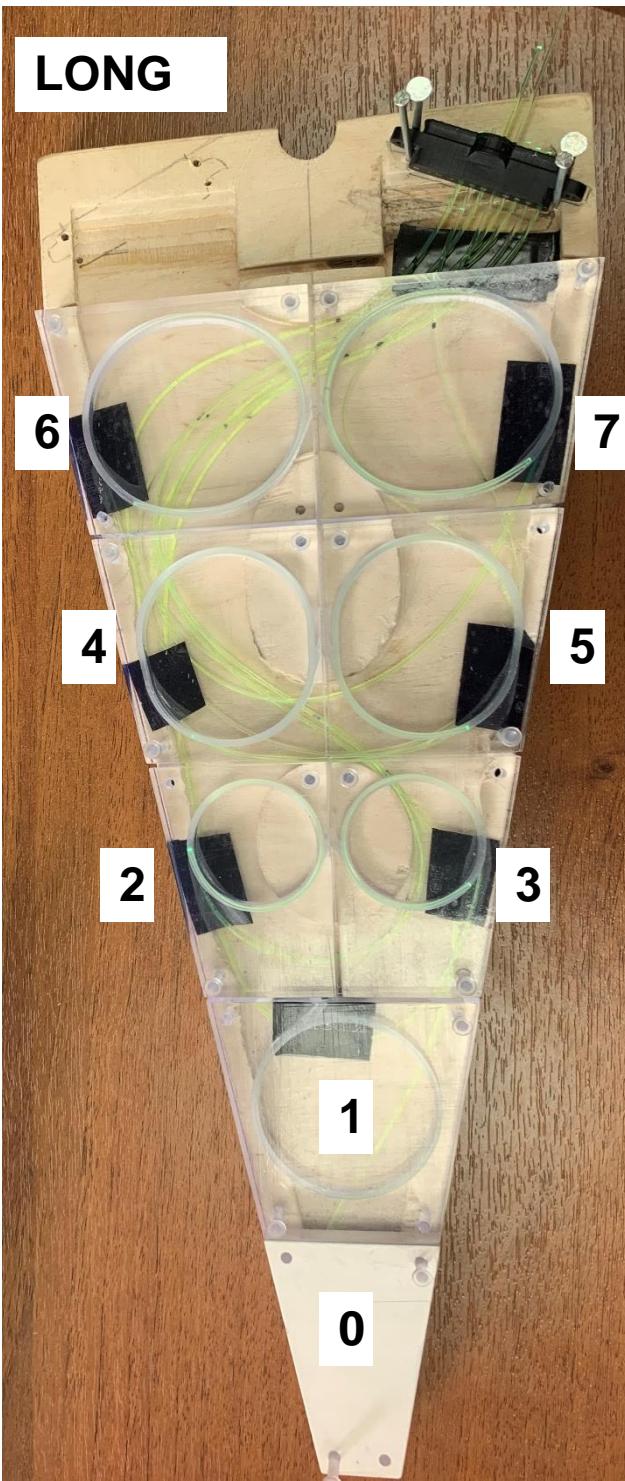


Ver. 4.4
**изготовление
1-й половинки для
малого кольца
(фанера)**



- ✓ **выбранная опция**
- рассмотреть варианты крепления
- финализация длин WLS

Backup

SHORT**LONG**

WLS length = 420 (to all)

The output for 0 & 1 tiles
without changes

7	6	5	4	3	2	1	0
> 3,2	> 4,8	> 5,5	= 5,2	> 5,8	> 3	> 3,5	> 3

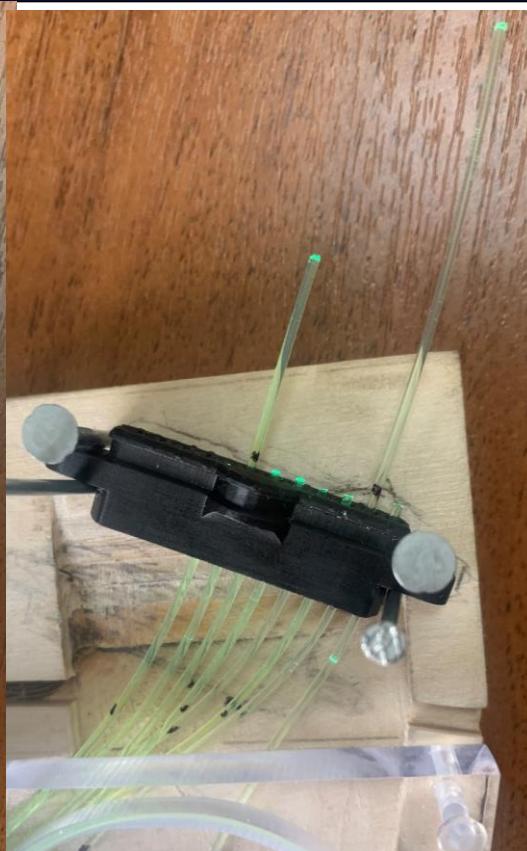
cm

~7cm

BBC assembling part

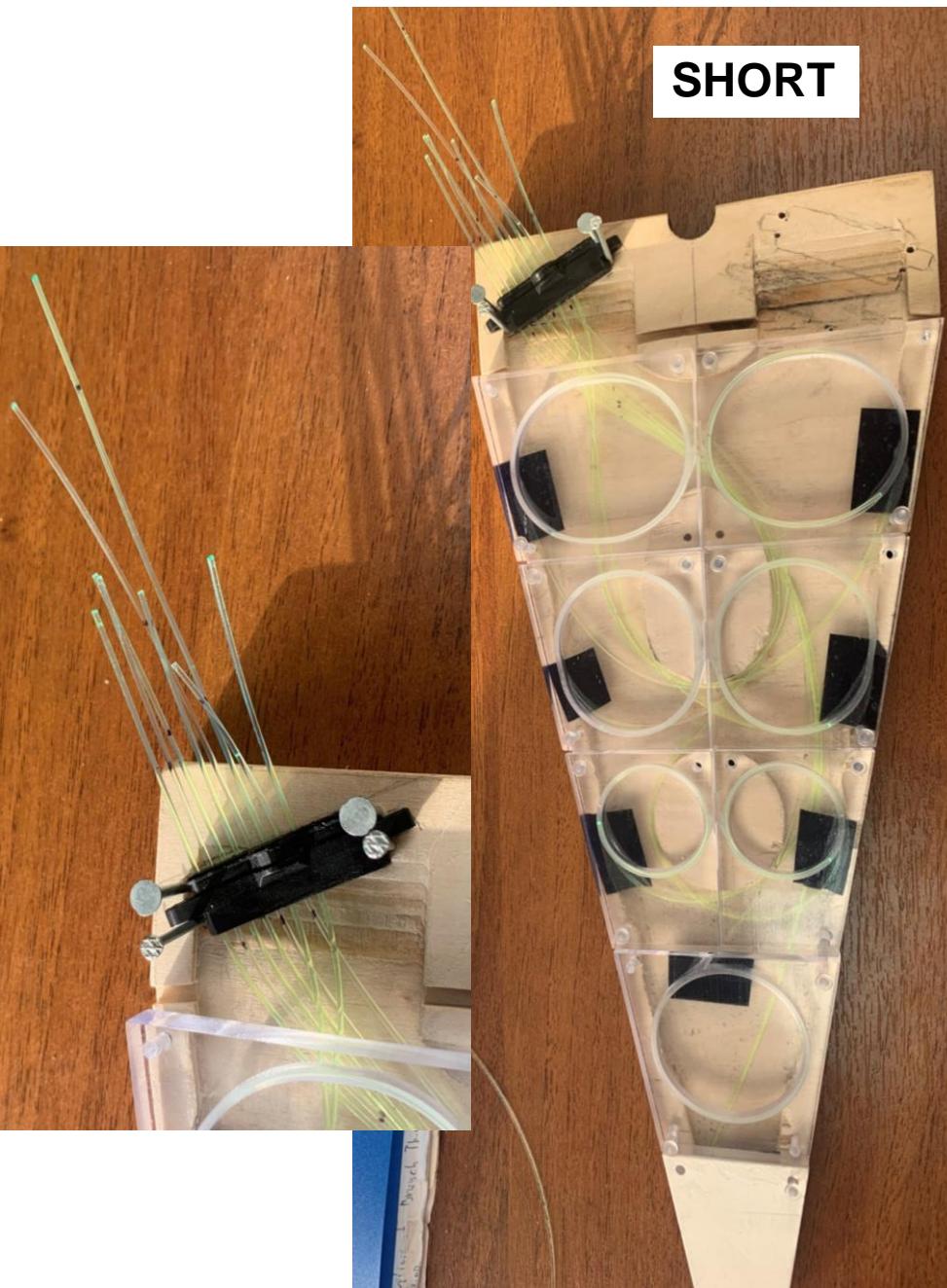


укладка WLS без перекрестий



BBC assembling part

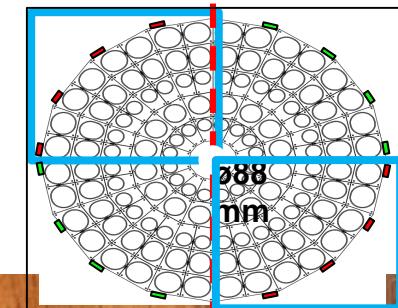
The ways for WLS (left output)



SHORT



LONG



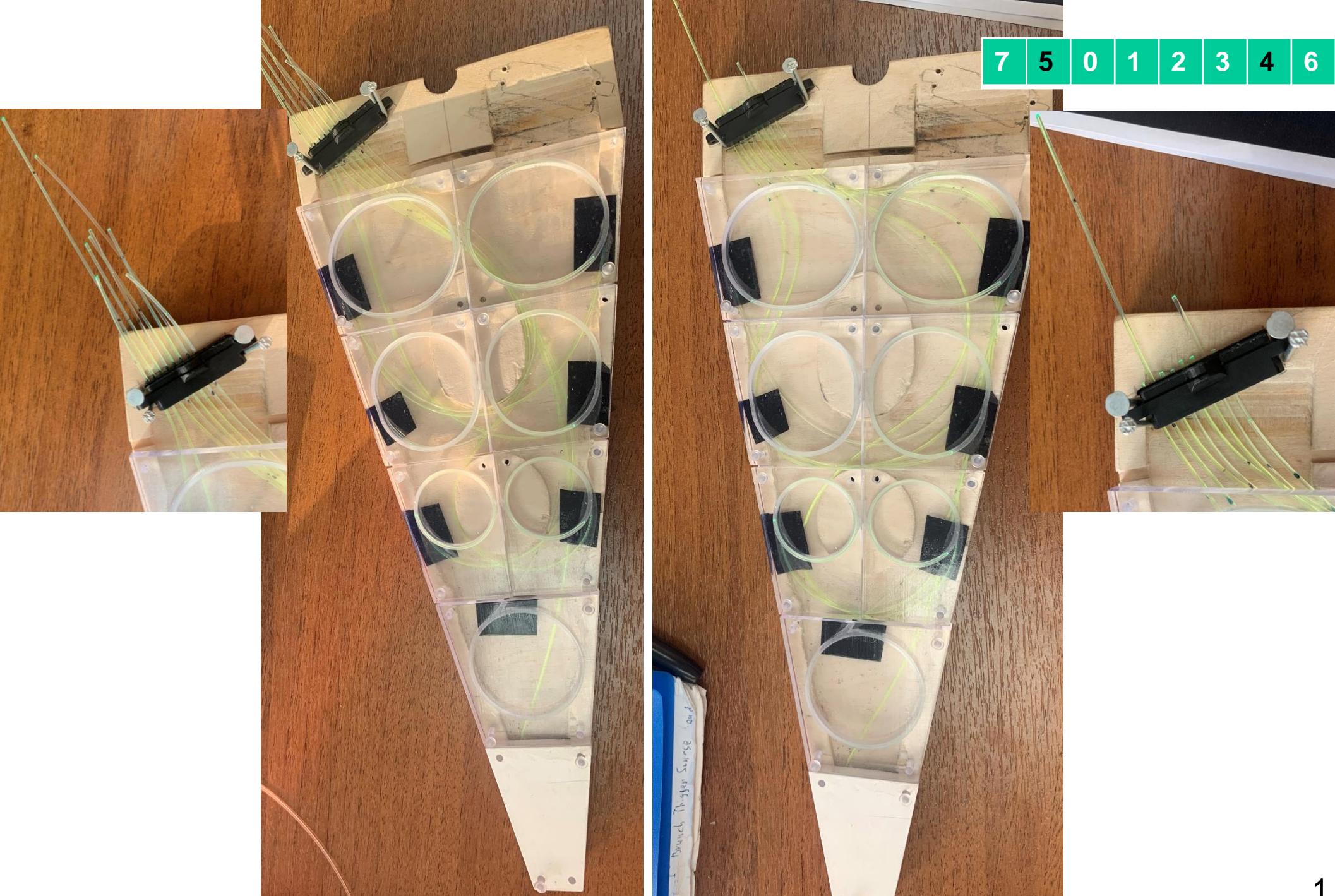
0	1	2	3	4	5	6	7
= 4,7	= 5	> 5,3	> 4,7	= 7,3	> 3,5	> 3,3	> 4,7

cm

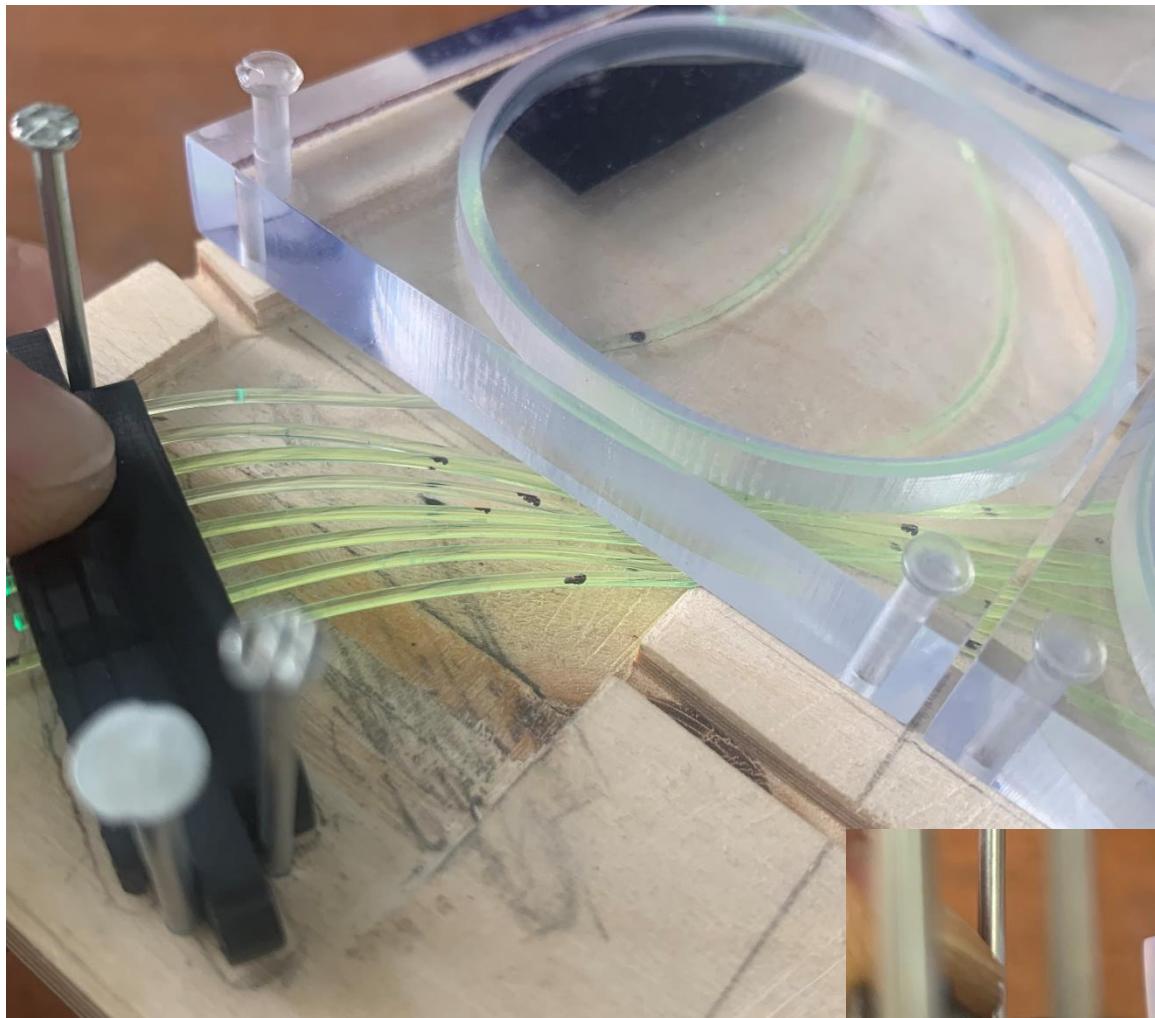
1
0

BBC assembling part

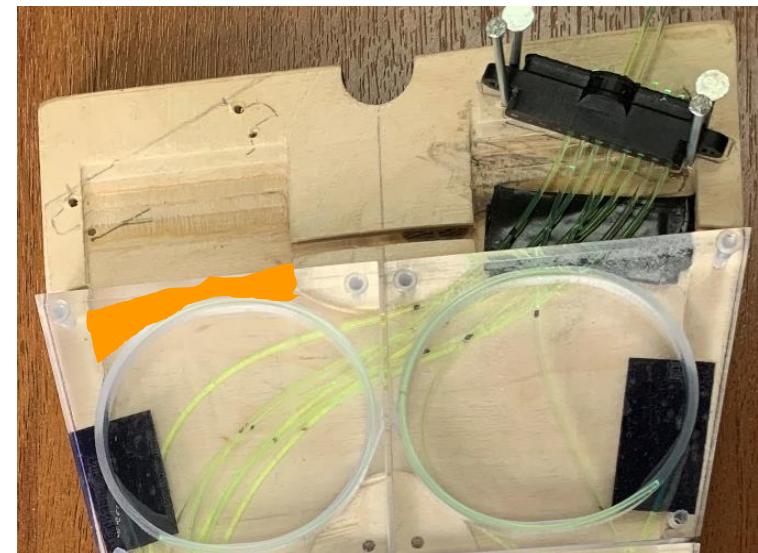
укладка WLS без перекрестий



BBC assembling part



The sandwich backplate grooves for BBC



left output

7	5	0	1	2	3	4	6
> 4,7	> 3,5	= 4,7	= 5	> 5,3	> 4,7	= 7,3	> 3,3

cm

right output

7	5	3	2	1	0	4	6
> 3,2	> 5,5	> 5,8	> 3	> 3,5	> 3	= 5,2	> 4,8

cm

~7cm
(max)

✓ assembly rules

- Consider the procedure for redoing the connector.



Preparation of infrastructure for mass production
(obtaining equipment, equipping rooms, etc.)



Materials

- Development of methods of mass production
(tools + algorithm)

Tiles and sectors: gluing frames



- The algorithm for polishing the connector has been proposed. The further developments are required:

algorithm working group BBC@MEPhI



tool working group BBC@JINR

- **Provide transportation** options for finished tiles
(sector wood backplates; $\frac{1}{2}$ wheel wood backplates(x2))