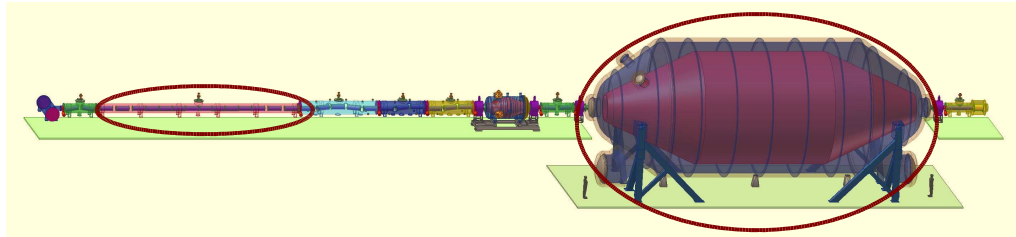


# Pre-Meeting of VI. KATRIN Collaboration Meeting

## -specifications of main components for 2004 tenders-



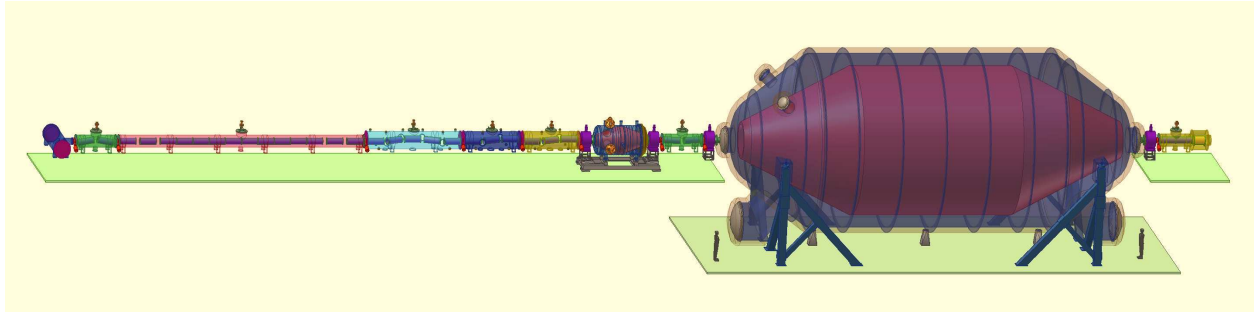
**Sunday - June, 6, 2004**

**Pre-Meeting – 1 :                    main spectrometer specification                    10:00 – 12:00**  
***Organizer: C Day***

<b>10:00</b>	<i>C Day</i>	15' + 05'	main spectrometer studies
<b>10:20</b>	<i>L Bornschein/ J Wolf</i>	15' + 05'	results & lessons of UHV tests
<b>10:40</b>	<i>A Osipowicz/ C Weinheimer</i>	20' + 05'	spectrometer length & magnetic homogeneity
<b>11:05</b>	<i>C Day</i>	30' + 25'	<u>specifications &amp; general discussion &amp; final decision</u>
<b>12:00 – 13:30</b>		90'	<b><i>Lunch Break</i></b>

**Pre-Meeting – 2 :                    WGTS specification                    13:30 – 16:00**  
**(6<sup>th</sup> working group meeting STS)                    Organizer: B Bornschein**

<b>13:30</b>	<i>B Bornschein</i>	15' + 05'	WGTS specification - status and open questions
<b>13:50</b>	<i>K Eitel</i>	15' + 05'	physics requirements for WGTS
<b>14:10</b>	<i>B Freudiger B. Bornschein</i>	15' + 05'	gas injection & gas dynamics WGTS
<b>14:30</b>	<i>R Gehring</i>	15' + 05'	magnet homogeneity of WGTS
<b>14:50</b>	<i>X Luo</i>	15' + 05'	gas dynamics – differential pumping section
<b>15:10</b>	<i>B Bornschein</i>	50'	<u>specifications &amp; general discussion &amp; final decision</u>



## VI. KATRIN Collaboration Meeting

organised by RAS- INR, Troitsk, June 7 - 9, 2004

Hotel Uzkoe, Moscow

### Monday - June, 7, 2004

<b>09:00</b>	<i>VA Matveev / V Lobashev</i>	10'	welcome
<b>09:10</b>	<i>VA Matveev</i>	10'	conferment of INR Markov award to Prof. V. Lobashev and Prof. E. Otten
<b>09:20</b>	<i>G Drexlin / C Weinheimer</i>	10'	Introduction & objectives of this meeting

### Plenary Session – I : Overview & News 09:20 – 10:40 *Chair: RGH Robertson*

<b>09:30</b>	<i>V Lobashev</i>	15' + 05'	Troitsk group present activity and near plans from Troitsk
<b>09:50</b>	<i>B Flatt</i>	15' + 05'	Recent background studies at Mainz
<b>10:10</b>	<i>C Weinheimer</i>	15' + 05'	News from neutrino physics & cosmology
<b>10:30</b>	<i>G Drexlin</i>	15' + 05'	KATRIN status & outlook
<b>10:50</b>		30'	<i>Coffee break</i>

### Plenary Session – II : Status of Main Components 11:20 – 12:25 *Chair: J Bonn*

<b>11:20</b>	<i>B Bornschein</i>	20' + 10'	Status Report source task
<b>11:50</b>	<i>C Day</i>	20' + 10'	main spectrometer
<b>12:20</b>	<i>J Wolf</i>	20' + 05'	pre-spectrometer

12:45 – 14:00                      85'                      *Lunch Break*

**Parallel-Session – A1 :    EMD & Source Charging (Task Meeting)                      14:00 – 16:00**  
***Organizers: EW Otten & C Weinheimer***

14:00 *C Weinheimer*                      05' + 05'                      Recent developments within the EMD task

14:10 *A Osipowicz*                      10' + 05'                      Magnetic stray fields and their correction

14:25 *K Valerius*                      10' + 05'                      Design studies on the main spectrometer

14:40 *A.K.Skasyrskaya*                      10' + 05'                      Optimisation of rear scanning system with electron gun

14:55 *F Glück*                      15' + 05'                      Status of the source charging problem and way to eliminate stored ions

15:10 *A. Nastoyashchii*                      20' + 05'                      Removal of WGTS low energy charge particles using crossed ExB fields and arising plasma turbulence

15:40 *all*                      20'                      discussion

**Parallel-Session – A2 :    Detector, SCS & DAQ (Task Meetings)                      14:00 – 16:00**  
***Organizer: H. Gemmeke & M Steidl & JF Wilkerson***

14:00 *S Wüstling*                      15' + 05'                      electronics for the segmented PIN-diode

14:20 *K Rielage*                      15' + 05'                      results from the UW e-gun test stand & future plans

14:55 *A Beglarian*                      10' + 05'                      status of the KATRIN SCS

15:10 *JF Wilkerson*                      10' + 05'                      status of ORCA

14:40 *M Steidl*                      15' + 05'                      KATRIN detector - requirements

15:25 *all*                      35'                      general discussion on detector, SCS & DAQ

**Parallel-Session – A3 :    Vacuum Issues (Group Meeting)                      14:00 – 16:00**  
***Organizer: C Day***

14:00 *all interested*                      120'                      general discussion on vacuum issues

16:00                      30'                      *Coffee break*

**Parallel-Session – B1 : Background and Simulation (Task Meeting) 16:30 – 18:50**  
**Organizer: K. Eitel & N Titov**

<b>16:30</b>	<i>K Eitel</i>	15' + 10'	status & open issues of BASI
<b>16:55</b>	<i>M Steidl for F Schwamm</i>	15' + 05'	results from the GEANT4 detector background MC
<b>17:15</b>	<i>JF Wilkerson for J Formaggio</i>	05' + 05'	detector background simulations at UW
<b>17:25</b>	<i>V Savichev</i>	20' + 05'	some fine effects in molecular tritium $\beta$ -decay
<b>17:50</b>	<i>E Lobanov</i>	20' + 05'	effect of electromagnetic field on tritium $\beta$ -decay and neutrino mass search
<b>18:15</b>	<i>LP Sukhanov, DA Perevalov</i>	20' + 05'	theoretical study of molecular effects at $\beta$ -decay in tritium
<b>18:40</b>	<i>all</i>	10'	discussion

**Parallel-Session – B2 : Calibration (Task Meeting) 16:30 – 18:40**  
**Organizer: O Dragoun**

<b>16:30</b>	<i>O Dragoun</i>	10' + 05'	first 3 years of calibration task and future plans
<b>16:45</b>	<i>J Kaspar</i>	10' + 05'	measurements of Am/Co photoelectron lines at Rez & Mainz with MC simulations of shapes & intensities
<b>17:00</b>	<i>M Rysavy</i>	10' + 05'	Am/Co photoelectron lines in monitor spectrometer: calculations of sensitivity limits
<b>17:15</b>	<i>N Kernert</i>	10' + 05'	$^{83m}\text{Kr}$ source for KATRIN
<b>17:30</b>	<i>B Müller</i>	10' + 05'	status of CKrS
<b>17:45</b>	<i>A Lubashevski</i>	10' + 05'	status of Rb/Kr source
<b>18:00</b>	<i>J Bonn</i>	10' + 05'	the KATRIN monitor spectrometer
<b>18:15</b>	<i>HH Telle</i>	10' + 05'	status of Laser Raman monitoring of WGTS
<b>18:30</b>	<i>all</i>	10'	discussion
<b>19:00</b>			<b>Dinner</b>

## Tuesday - June, 8, 2004

07:20 *all interested*

Venus - solar transit (1. & 2. contact)

### Plenary Session – III : test experiments & setups

09:00 – 10:05

*Chair: M. Glugla*

09:00 *O Kazachenko*

15' + 05'

the TILO experiment at TLK

09:20 *F Eichelhardt*

10' + 05'

the TRAP experiment at TLK

09:25 *R Gehring*

10' + 05'

status of KAMAT, cryo free magnets & DPS2-F

09:40 *E.V.Geraskin*

10' + 05'

progress of TCF-50 installation

### Parallel Session – C1 : Collaboration Board Meeting

10:05 – 12:30

*Organizer: J Blümer*

10:05-12:30

**Collaboration Board Meeting**

### Parallel-Session – C2 : Pre-Spectrometer Measurements (WG Meeting) 10:05 – 12:30

*Organizer: L Bornschein*

10:05 *L Bornschein*

20' + 10'

pre-spectrometer measurement Programme

10:35 *S McGee*

15' + 10'

update on the pre-spec inner electrode works at UW

10:55 *S.V.Zadorogny*

15' + 10'

progress on electron gun

11:20 *Th Thümmler*

10' + 05'

status of pre spectrometer HV and precision divider

11:35 *all*

60'

discussion

### Parallel-Session – C3 : Time for Discussions

10:05 – 12:30

*Organizer: ad hoc*

10:05 *all interested*

150'

general discussions

12:30 – 14:00

90'

**Lunch Break**

13:20 *all interested*

Venus - solar transit (3. & 4. contact)

**Plenary Session – IV**      **Collaboration Issues-I**      **14:00 – 15:10**  
**Chair: H. Gemmeke**

<b>14:00</b>	<i>M Noe/J Bonn</i>	30' + 15'	Technical Coordination
<b>14:45</b>	<i>J Blümer</i>	20' + 05'	Report from the Collaboration Board
<b>15:10</b>		30'	<i>Coffee break</i>

**Plenary Session – V**      **Reports from the Parallel Sessions**      **15:40 – 15:00**  
**Chair: V Lobashev**

<b>15:40</b>	<i>C Weinheimer</i>	15' + 05'	Report from the EMD meeting
<b>16:00</b>	<i>EW Otten</i>	15' + 05'	Report from source charging meeting
<b>16:20</b>	<i>M Steidl/ JF Wilkerson</i>	15' + 05'	Report from the detector/DAQ meeting
<b>16:40</b>	<i>O Dragoun</i>	15' + 05'	Report from the calibration meeting
<b>17:00</b>	<i>K Eitel</i>	15' + 05'	Report from the BASI meeting
<b>17:20</b>	<i>L Bornschein</i>	15' + 05'	Report from the pre-spec measurements meeting

**Plenary Session – VI**      **Collaboration Issues-II**      **17:40 – 18:30**  
**Chair: CSPs**

<b>17:40</b>	<i>Co-SP's</i>	20' + 15'	KATRIN proposal, conferences,
<b>18:15</b>	<i>all</i>	10' + 05'	A.O.B., next meeting, conferences, proposal,...
<b>18:30</b>			<b>end of sessions</b>

conference dinner

**Wednesday - June, 8, 2004**

**09:00** *all*      **bus leaves for visit of Troitsk neutrino mass experiment**