

NCC

Plans

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Tasks

- CDR
- Simulation
- Prototype
- NCC – real thing
- money
- collaborators
- Prototype and real thing
 - Sensors
 - Electronics
 - Preamp design
 - preamp board
 - ADC and readout

Cast of characters

- Moscow State U – Merkin – Silicon sensors
- INFN, Trieste- Vachii - PreAmp
- JINR – Dubna – Malakov (director), Anotoly Litvinenko
 - Veksler and Baldin Laboratory of High Energies. *Director: [A.I. Malakhov](#)*
 - Mechanical Design
 - Integration
 - Construction of prototype?
 - Electronics (with MIFI?)
- Moscow Engineering and Physics Institute (**MEPhI**) - Veronin
 - Electronics group – Preamp-Atkin
- Prague Charles University– Finger, Vrba – pi⁰/gamma
 - University of New Mexico
 - Doug Fields, Jan Rak
- Saclay-Clairmont – Testla Preamp
- D0 (FNAL) – Hybrid (SVX-4) burn in stand
- Riken – Atsushi
- UCR –RKS, Vassili
- BNL – Edward
- Colorado?
- Ill – Matthias

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Possible Europeans

- INFN Trieste
 - COMPASS, Franco Bradamante(to BNL? Boss), Fulvio Tassarotto Silvia Dalla Torre, Anna Martin; Andrea Vacchi(Boss)
- INFN Frascati
 - HERMES, Enzo de Sanctis, Pasquale Di Nezza(Boss) , Nicola Bianchi, Delia Hasch
- INFN Ferrara
 - HERMES, Paola Dalpiaz
- Prague group
 - Charles University, ?,?
 - Miraslov Finger
 - Vrba
- DESY-Zeuthen
 - HERMES, Wolf-Dieter Nowak(to bnl), Ekle Aschenhauer
- Warzaw
 - Jan Nassalski, Ewa Rondio, Barbara Badelek, Krzysztof Kurek, Andrzej Sandacz
- Max-Planck
 - Alan Caldwell (phone meeting?)
- British QCD community

Prototype

- Detector – 2 sensors wide – JINR will pay local costs and materials
 - JINR mechanical+ tungsten+ assembly
 - MSU – Sensors
 - Design and production of sensors – Merkin at Moscow State (UCR pays)
- PreAmp – CR1 (Vacchi has these)
- Boards for preamp available (MePhi?)
 - Need some components
- Readout via CAMAC or some commercial thing
- DAQ – PC
- Date – End 2005
- test at Dubna test beam
- Pi0/Gamma – prototype Charles University
 - both sensors and electronics (SVX-4)

Real Thing - detector

- Sensors – MSU for design
 - Find manufacturer?
- Mechanical Design – Dubna
 - Also may be able to provide integration engineer for central region (Support from BNL?)
 - Assembly at Dubna – (bonding?)
 - Tungsten – purchased in Russia (paid by Riken?)

Real thing- Preamp

- Pre-Amp – Needs 2 year (several possibilities)
 - need factor of 1000 dynamic range [16 bit dynamic range, with 12 bit accuracy – several schemes being tried – Solin]
 - Trieste – as a commercial development of a modified CR3A
 - change 4 to 16 channels
 - change base to base shaping to 3-500 ns
 - dynamic range is probably OK
 - Saclay/Clermont (Testla pream?)
 - Dubna
 - Note: All will go via same broker in Europe
 - Needs funding for production

Real thing – cables, preamp board

- Dubna??

Real thing- cables – Readout board/ADC

- Find Commercial ADC
- Chi
- Dubna Electronics engineers

Real thing -LVL-1 and triggering

Real thing-Online Software

Simulations – Physics case

- RKS in charge for now
 - Vassily
 - Astrid
 - Colorado?
 - need to recruit more folks (Europe, Japan, Korea,

Schedule

- Big meeting in March at BNL
 - review plans
 - go over CDR
- CDR due in May

CDR

- Due in May
- Many of these assignments will change as folks join
- Parts and tentative assignments
 - Intro -rks
 - Physics case – rks+Ed K.
 - simulations (vassily, astrid, Jamie,
- Detector overview and design– Edward
 - Sensors – Merkin+Edward
 - Construction – Edward
 - Electronics – Edward-Chi
 - Preamp/ and preamp boards
 - readout – chi?
 - cabling-?
- Software and Calibration issues- Vassily?
- Cost and schedule – RKS
- Collaboration Issues - RKS

Funding sources

- UCR (90K) Solin, MSU prototyping
- Riken (200K)
- Prague (?) for development of gamma/ π^0
- Dubna (50K) for prototype detector construction
- Riken - Tungsten