

**EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH
ORGANISATION EUROPEENNE POUR LA RECHERCHE NUCLEAIRE**

CERN - PS DIVISION

PS/ AR/ Note 95-05 (Info.)

**COPIE DES TRANSPARENTS PRESENTES A LA REUNION DU
GROUPE AR DU 16 JANVIER 1995**

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Geneva, Switzerland
19 January 1995

HIGHLIGHTS

- Bonne fiabilité de l'ensemble
(Zone Cible, AAC, LBAR)
- Bonne efficacité générale ($E_x > 80\%$ voir 90%)
 $E_{acc} \sim 95\%$
- 7.5×10^7 injectés dans le ar (JETSET)
- Electron Cooling utilisé en opération à
basse énergie sans problème
- Test Plomb :
 - Injection depuis Linac
 - Tests 3 optiques
 - Cooling

Objectifs 95

1. OPERATION DES \bar{P}

- maintenir l'efficacité générale à un niveau élevé comme 94
- maintenir un bon niveau de fiabilité
- résoudre le problème 200 Rev/c

2. ECCOL

- continuer les études (instabilités, neutralisation, ...) et développements (2e et 3e éch.)
- poursuivre la collaboration et les invitations "visiteurs"

3. Stochastic Cooling

- Continuer études et développements pour maintenir une bonne efficacité et fiabilité
- Continuer l'étude sur le SC des faisceaux bunchés.

4. Production \bar{p} .

- Maintenir la fiabilité à un bon niveau comme en 94 (faire mieux!)
- Continuer les développements qui améliorent l'efficacité générale (interlocks, cones, ...)

5. Ions Plomb

- Séances d'études à organiser
- Comprendre la durée de vie
- Temps de cooling

6. Collaboration avec FERMI/AB et pour suivre.

OFFICIAL AGREEMENT FOR STUDIES ON THE NEUTRALIZATION OF DENSE ELECTRON BEAMS

This document is the official agreement between CERN (European Organization for Nuclear Research) in Geneva, JINR (Joint Institute for Nuclear Research) in Dubna, and INP (Budker Institute for Nuclear Physics) in Novosibirsk, concerning the studies and experiments on techniques aiming to neutralize dense electron beams to be used on the CERN-LEAR cooler and on the JINR-K-4 cooler project to produce very cooled dense ion beams.

The tests and experiments will be made on "test benches" actually operational at CERN and JINR, and on the coolers themselves.

The studies to be performed in the frame of this collaboration may involve Russian experts from some other Russian laboratories by mutual agreement between all the laboratories concerned, and by addendum to this agreement.

1. PROGRAMME OF STUDIES, EXCHANGE OF EXPERTS

The programme of studies and of experiments is set up by all the experts involved in this collaboration. Each laboratory will cover the expenses for the experiments made in situ; however, the delivery of some hardware items is foreseen between the laboratories.

The annual budget will not exceed:

- For CERN: an equivalent of 7 man-month subsistence dedicated to the visit of Russian experts to CERN, and kCHF 20.- for the delivery of some components and/or for funding some students preparing a doctoral thesis in this field.
- For JINR and INP: an equivalent of 3 man-month subsistence dedicated to the visit of CERN experts.

2. OBLIGATIONS OF THE LABORATORIES INVOLVED

CERN

- Participates in the studies and experiments on the test benches and electron coolers,
- Covers the subsistence of the visiting Russian experts in Geneva, including health insurance,
- Pays for the travel expenses of the CERN specialists between Geneva and Moscow.

JINR and INP

- Participate in the studies and experiments on the test benches and electron coolers,
- Cover the subsistence and travel expenses of the CERN experts in Russia,
- Pay for the travel expenses of the Russian experts between their home station and Geneva,
- Provide some hardware components to CERN.

CERN, JINR and INP

- The laboratories agree that the papers related to this collaboration must be submitted to the Coordinators (see Chapter 3) prior to any publication.

3. COORDINATION OF THE COLLABORATION

There are two Coordinators:

For CERN: Dr. Jacques BOSSER
For JINR and INP: Prof. Igor MESHKOV

4. DURATION OF THE COLLABORATION

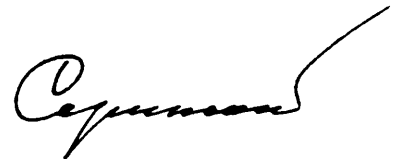
The collaboration will start on January 1, 1994 for a period of two years with the possibility of an extension for a further period of two years. It can be cancelled at any time by CERN or JINR or INP with no obligations.



L. Montanet
CERN



V. Kadyshevsky
JINR



A. Skrinsky
INP

**COMPLEMENT TO THE OFFICIAL AGREEMENT
SIGNED BETWEEN CERN AND RUSSIA FOR STUDIES ON THE
NEUTRALIZATION OF DENSE ELECTRON BEAMS**

A Protocol entitled "*Official Agreement for Studies on the Neutralization of Dense Electron Beams*" (PS/AR/Note 93-22 (Spec.)) has been signed between Russia and CERN, to define a collaboration between a number of different laboratories, in order to investigate the physics and techniques in the field of neutralization of dense electron beams. These types of beam form an essential part of the electron cooling programme in LEAR.

In Paragraph 1 of the Protocol is mentioned the attribution of 20 kCHF per year for the delivery of some components and/or for funding some students. Five subjects involving seven Russian collaborators, listed hereafter, have been retained for 1994 and to them have been attributed a sum of 1 800 CHF each. The payment of this sum is subject to the publication, before the end of 1994, by the Russian experts, of a report on the status or on the conclusions of their work. Explicitly, it means that each subject is defined for 1994 only. The continuation of the work will depend on the Coordinator's agreement.

A CERN correspondent has been designated for each proposal. The Russian experts will have the possibility to contact him at any time, and he will act as a referee on request of the Coordinators.

Depending on the progress of the work, the subjects may be amended and/or modified by mutual agreement with the Coordinators during 1994.

Coordinators

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Russia

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Switzerland

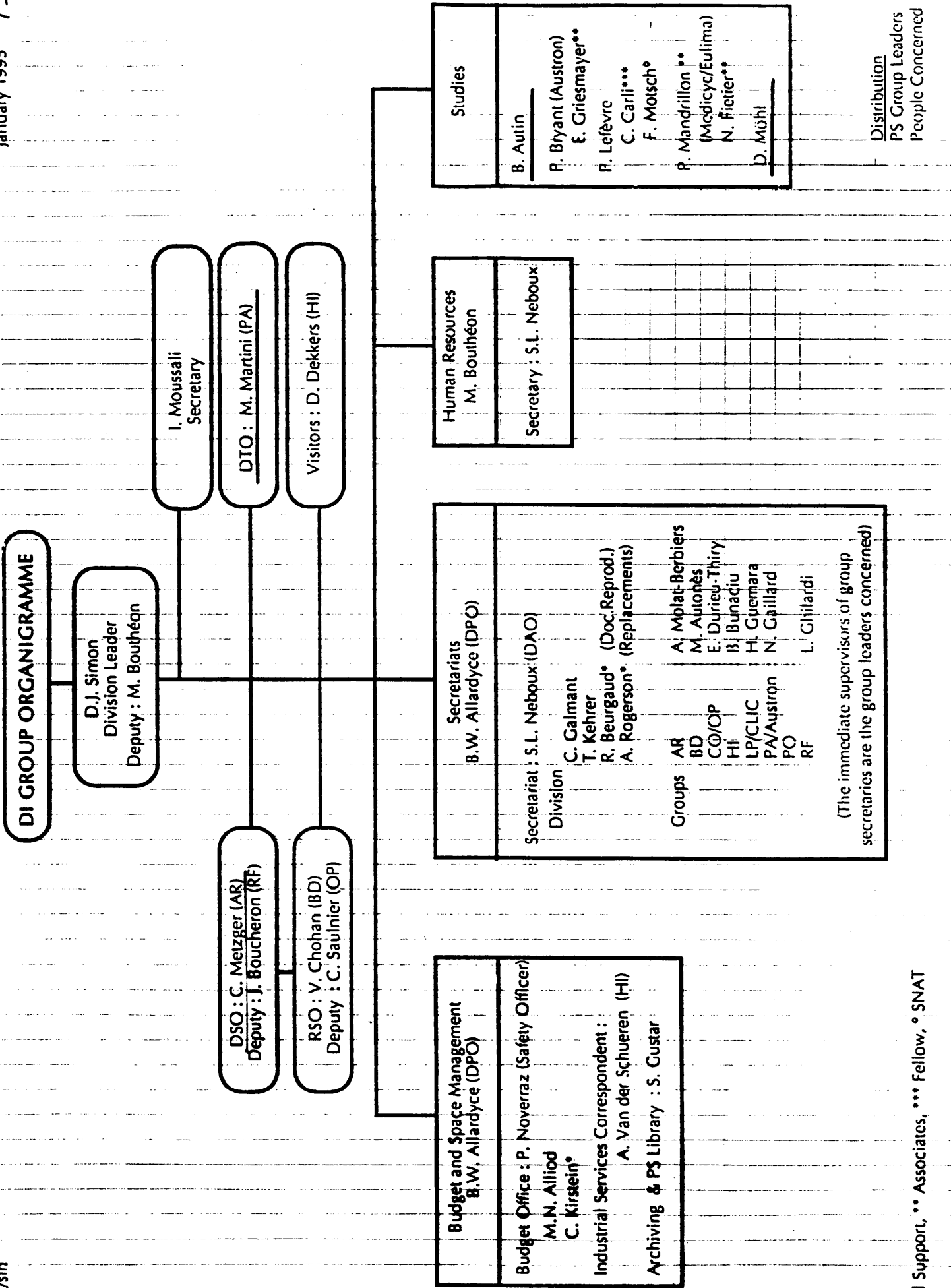
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Phone: +41 22 767 3786
Fax: +41 22 767 91 45

Visiteurs version date : 20-12-94

Bonjour,

Voici les dates d'arrives ainsi que la (re)distribution des bureaux pour nos prochains visiteurs :

Noms	Dates	Bureaux	Paye par
* I. Meshkov	19/03-09/04	9-1-029	Bosser
* G. Ter Akopian	19/03-26/03	19-3-041	Bosser
* M. Church	28/03-17/04	19-3-041	Dekkers
* A. Smirnov	02/04-30/04	9-1-029	Bosser
* A. Lavrentiev	31/05-02/07	9-1-029	Bosser
* V. Poliakov	31/05-02/07	9-1-029	Bosser
* L. Femenias	01/06-30/06	9-1-020	Non-payé
* I. Meshkov	01/07-06/07	9-1-029	Bosser
* I. Hofmann	07/07-31/08	9-1-029	Dekkers
* P. Zenkevitch	06/07-15/08	19-3-041	Bosser (4w) Dekkers (2w)
* E. Mustafin	06/07-15/08	19-3-041	Dekkers
* F. Motsch	13/09-31/12 (95)	9-1-029	(VSNA P. Lefevre)
* T. Scholz	01/10-07/11	9-1-011	Dekkers (6w)
* U. Oeftiger	08/11-21/12	19-3-041	Mathewson (6w)
* E. Syresin	07/11-15/01	9-1-027	Dekkers
* I. Meshkov	12/11-10/12	9-1-011	Bosser
* R. Alvez-Pires	29/11-22/12	9-1-011	Bosser
- C. Carli	04/12-16/12	19-3-041	Dekkers
	01/01-31/12 (95)	9-1-029	confirme (fellow P.L.)



* Industrial Support, ** Associates, *** Fellow, ° SNAT

Distribution

PS Group Leaders
People Concerned

Départs / Modifications

J. Chevallier }
C. Hazebine } ⇒ retraite

B. Autin }
D. Hoehl } ⇒ DI

B. Williams → PA

J. Guillaume → Section R. Maccaferri

R. Hey : Suivi des travaux AAC et LEAR

R. Maccaferri : TSO (AAC)

C. Metzger : - DSO (1/01 → 2/04/95)
- DSO adjoint (note)

G. Molinari : - TSO (LEAR)

- Linkman et responsable
de l'électronique ECOOL

+ R. Sautier (prest. service)
(très important pour nous)

Après tous ces mouvements :

⇒ 14 personnes

ARRIVÉE 5

—

LEAR SCHEDULE 1995

JAN					FEB					MAR				
Wk	DASH 9	16	23	30	6	13	20	27	6	13	20	27		
Mo	1	2	3	4	5	6	7	8	9	10	11	12	13	
Tu														
We											S.U. of Unoc. LRI. PS. LEAR			
Th												MD (p)	MD (p)	
Fr														
Sa														
Su														

APR				MAY				JUN					
Wk	3	10	17	24	1	8	15	22	29	5	12	19	26
Mo	14	15	16	17	18	19	20	21	22	23	24	25	26
Tu	MD (p)	200					PS MD			300	PS MD		
We		PS 196 + PS 197	PS 196 + PS 201	PS 196 + PS 201	PS 196 + PS 201	PS 196 + PS 201	PS 196 + PS 201	PS 196 + PS 197	PS 196 + PS 197	PS 201 + PS 202	PS 201 + PS 202	PS 201 + PS 202	Shutdown
Th		PS 196 + PS 197	PS 196 + PS 201	PS 196 + PS 201	PS 196 + PS 201	PS 196 + PS 201	PS 196 + PS 201	PS 196 + PS 197	PS 196 + PS 197	PS 201 + PS 202	PS 201 + PS 202	PS 201 + PS 202	
Fr													DASH MD
Sa	LEAR-SU												
Su													

PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T

JUL				AUG				SEP					
Wk	3	10	17	24	31	7	14	21	28	4	11	18	25
Mo	S.U. PS												
Tu							PS 196 + PS 205					PS MD	
We		PS 196 + PS 197	PS 196 + PS 197	PS 196 + PS 205	PS 196 + PS 205	PS 196 + PS 205	PS 196 + PS 205	PS 196 + PS 205	PS 196 + PS 205	PS 197	PS 197 + PS 208	PS 197 + PS 208	PS 197 + PS 208
Th		PS 196 + PS 197	PS 196 + PS 197	PS 196 + PS 205	PS 196 + PS 205	PS 196 + PS 205	PS 196 + PS 205	PS 196 + PS 205	PS 196 + PS 205	PS 197	PS 197 + PS 208	PS 197 + PS 208	PS 197 + PS 208
Fr	DASH												
Sa													
Su													

PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T

OCT				NOV				DEC					
Wk	2	9	16	23	30	6	13	20	27	4	11	18	25
Mo	105				105								
Tu		PS 201 + PS 194											
We		PS MD	Shutdown										
Th	PS 201 + PS 194			S.U.	PS 201 + PS 197	PS 201 + PS 197	PS 201 + PS 197	PS 201 + PS 197	PS 201 + PS 197	PS 207	PS 207	PS MD	
Fr													
Sa													
Su													

PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T DASH PS200T PS196 PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T PS196 PS200T

DASH
 LEAR-MD
 Shutdown/Tests

Version 1.2 - 11 November 1994
M. Doser

vous avez acceptee le 9 janvier. Merci a tous pour cette bonne volonte.

Si donc les procedures officielles restent identiques a l'annee 1994, je vous propose le calendrier suivant:

fin des interviews annuels	31.03.95
- <u>propositions des chefs de groupe envoyees a M.Boutheon</u> avant le	31.03.95

RIEN ne vous empeche de me communiquer vos propositions avant si vous etes en mesure de le faire !!

- reunion administrative chefs de groupe 5.04.95
presentation des propositions, discussion,
choix des candidats pour assessements internes

Rappel: assessements internes PS eventuels:

- . avancements zero ou retardes
- . doubles steps "contestes"
- . extensions exceptionnelles filieres "contestes"
- . changements de filiere cat 2

assesements internes obligatoires:

- . changement de filiere VI a VII (TEACC)

assesements obligatoires avec PE:

- . tous changements de filieres II a VI

- deuxieme reunion administrative si necessaire 19.04.95
(selon les feed-back division PE et/ou assesseurs)
- reunion finale administrative avec assesseurs; 26.04.95
etablissement de la liste definitive des propositions de la division
- liste communiquee a la division du PErsonnel 5.05.95
- Cas soumis au comite TEACC et Senior Staff Advancement Committee Mai 1995
- assessements avec la section de classification Juin-Sept
- avancement discute avec Director General, Directorate, CERN Management Board Juin 95
- date effective des decisions 01.07.95

3. Assesseurs techniques PS.

Filieres VII et VII -> VIII : D.Dekkers D.Williams

Filieres VI et VI -> VII : R.Cappi J.P.Potier D.Warner
 (remarque: VI -> VII : TEACC)
 Filieres II a V and changes : G.P.Benincasa C.Hill B.Frammery
 up to V -> VI P.Pearce C.Metzger C.Serre H.Ulrich
 Contrats indetermines : D.Moehl J.P.Riunaud M.Boutheon

 Ce calendrier et les procedures sont une proposition:

- les commentaires sont bienvenus

= tout est base sur l'experience 1992,93 et 94: cette proposition n'est
 valable que si les documents officiels restent stables...

 REMARQUE: * en 95 la majorite du travail est concentree pendant les *
 * semaines 14,15(Paques)16 et 17 !! *
 * Je ne peux que vous suggerer de preparer tres tot les drafts *
 * des documents supports pour vos avancements exceptionnels.. *

Merci. Marcel B.

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