



Consultants' Meeting on
Evaluation of Nuclear Moments
27-30 March 2017
G0E85, IAEA Headquarters, Vienna, Austria

PROVISIONAL AGENDA

Monday, 27 March

09.00	Welcome and opening remarks	NDS Section Head
	Administrative matters	Dimitriou/Lidija
	Election of Chairman/Rapporteur	
	Adoption of Agenda	
09.15	<i>Objectives and outline of the meeting</i>	Dimitriou (15')
09.30 – 12.30		
	<i>Table of recommended nuclear moments - what needs to be done</i>	Stone (20')
	<i>Online Database</i>	Merzimekis (10')
	<i>Spins and magnetic moments</i>	Kondev (15')
	<i>Nuclear Magnetic Dipole Moments from Gas</i>	Jackowski (10')
	<i>Phase NMR Spectra</i>	
	<i>Hyperfine anomaly from an atomic physics view</i>	Persson (10')
	<i>Nuclear quadrupole interactions</i>	Pyykkö (10')
	<i>Short-lived states</i>	Stuchbery (10')
	<i>Collinear Laser spectroscopy at ISOLDE</i>	Bissell (10')
	(Coffee break as needed)	

Session 1: The most precise moments.

Corrections for diamagnetism

Introduction	Jackowski (30'+)
Other contributions:	
<i>Corrections concerning applied fields in other techniques</i>	Stone
Discussion	

(Coffee break as needed)

12.30 – 14.00 Lunch

14.00 – 17.30 **Session 1 cont'd**

Tuesday, 28 March

09.00 – 12.30 **Session 2**

Methods to study moments and radii of long-lived (> 1 ms) and stable isotopes and isomers

Neyens (10')

Session 2: The hyperfine anomaly

Potential for, and interest in making, correction for this effect

Introduction

Persson (30'+)

Other contributions:

Hyperfine anomalies in Bi

Bissell

Hyperfine anomalies in atoms and metals: experiments on Au isotopes

Stone

Discussion

(Coffee break as needed)

12.30 – 14.00 Lunch

14.00 – 17.30 Continue session 2 / start session 3

Session 3: Measurements on short-lived excited states

Transient Field measurements

Introduction

Stuchbery (30'+)

Other contributions:

Calibration problems in the TF method

Stone

NMR, TDPAD, laser spectroscopy

Neyens

Discussion

(Coffee break as needed)

19.00 Dinner at local restaurant

Wednesday, 29 March

09.00 – 12.30 **Session 3 cont'd**

Contributions regarding aspects of measurement of excited state moments

Other methods TDPAC, TDPAD, IPAC, Mossbauer effect ...

Discussion

(Coffee break as needed)

12.30 – 14.00 Lunch

14.00 – 17.30 **Session 4: Nuclear electric quadrupole moments**

Introduction

Pyykkö (30+)

Other contributions:

Evaluation of quadrupole moments in the sd-shell quadrupole moments of $^{8,9}\text{Li}$ isotopes Neyens

Problem elements and secondary standards in Q extraction

Stone

Quadrupole interactions in 'cubic' ferromagnets – a complication in NMR/ON'

Stone

Discussion

(Coffee break as needed)

Thursday, 30 March

09.00 – 12.30 Start wrap-up session with summaries

Session 1

Jackowski (30')

Session 2

Persson (30')

Session 3

Stuchbery (30')

Session 4: What is needed for QEM?

Pyykkö (30')

Discussion regarding next steps, actions and those involved.

(Coffee break as needed)

12.30 Closing of the meeting.