

2nd DM Radio Collaboration Meeting

August 13-14, 2020

Location: everywhere

<https://indico.slac.stanford.edu/event/431/>

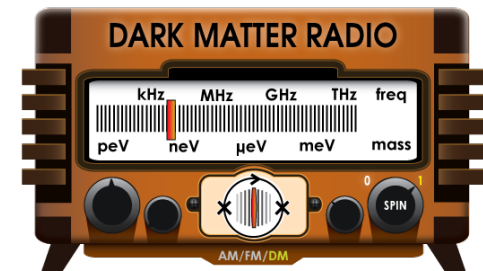
Thursday 7:50AM — 1:30PM (PST)

*** *Collaboration Happy Hour 4pm (PST) Thursday!***

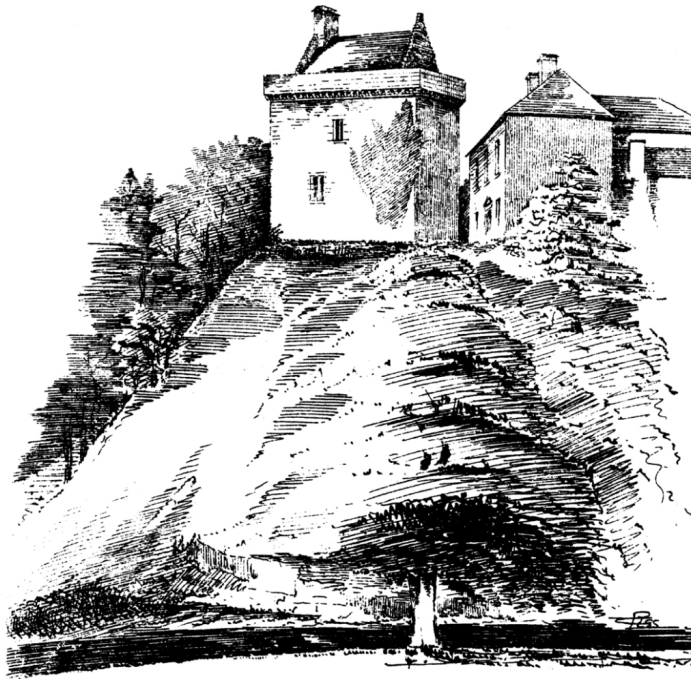
Friday 8:00AM — 1:30PM (PST)

Introduction: 364 years of DM Radio

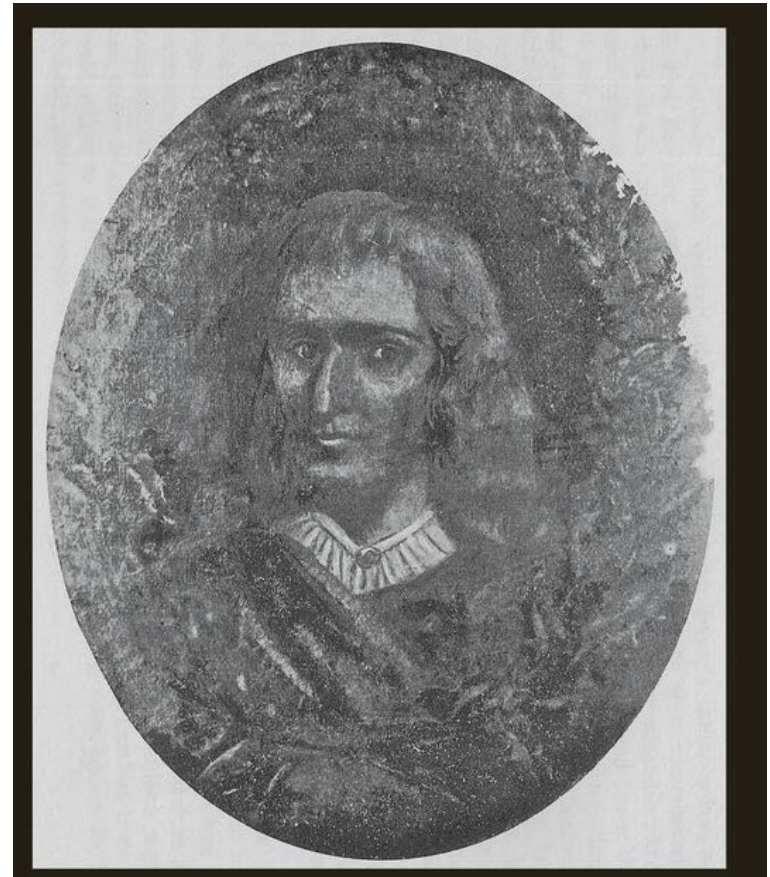
Welcome to new collaborators



A message from the 1600s to the DM Radio Collaboration



Bonshaw Tower
Dumfriesshire, Scotland
Home of the Bonshaw Irwins
since ~1500



Dr. Christopher Irvine
of Bonshaw, Scotland
Medicina Magnetica
Printed in the Year 1656

Medicina Magnetica:
O R,
The rare and wonderful Art
Of Curing by
S Y M P A T H Y:

Laid open in A P H O R I S M E S ;
Proved in C O N C L U S I O N S ;
And digested into an easy Method
drawn from both :

Wherein the Connexion of the Causes and
Effects of these strange Operations, are more
fully discovered than heretofore.

All cleared and confirmed, by pithy Reasons,
true Experiments, and pleasant Relations.

Preserved and Published,

AS A MASTER-PIECE in this SKILL.

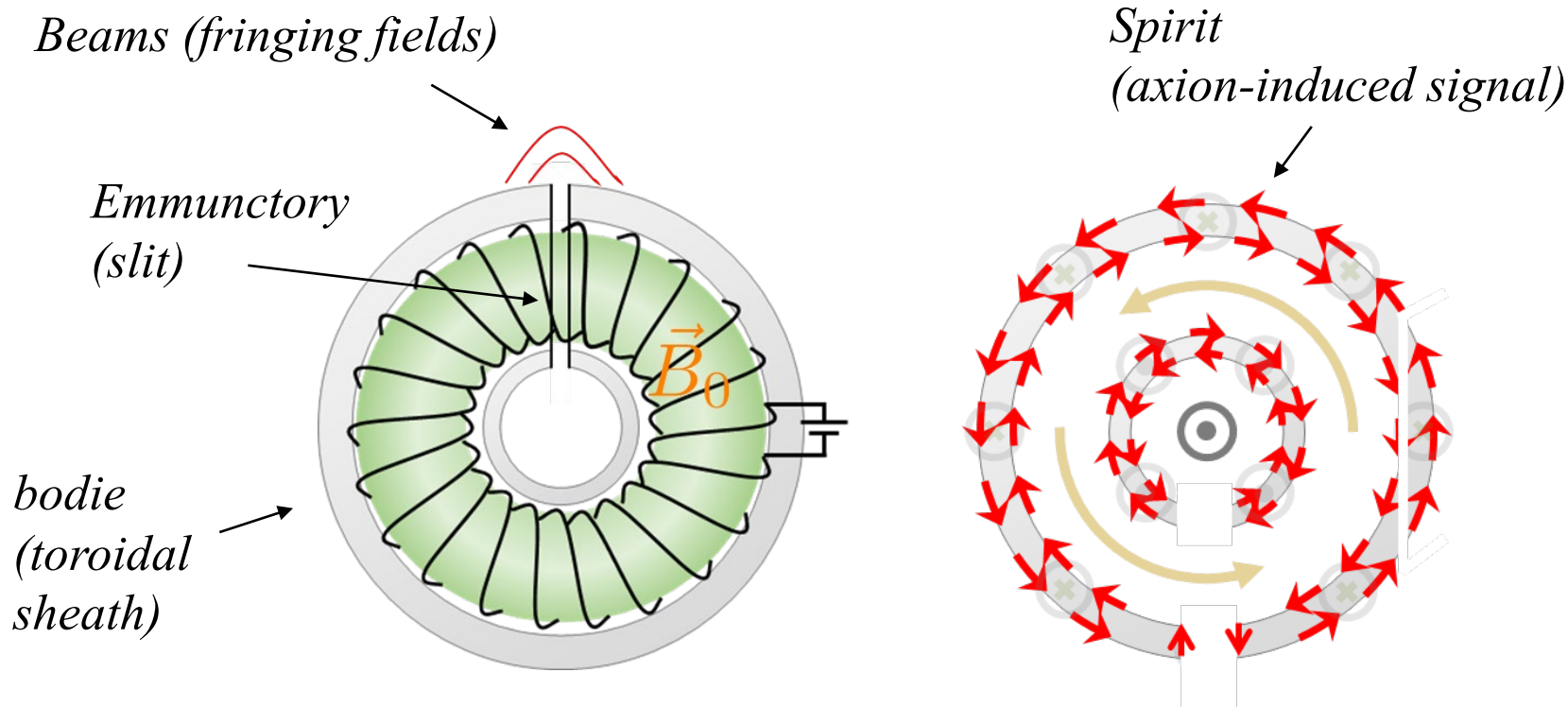
By
C. de Iryngio, Chirurgo-Medicine in the Army.

Nullum numen abest.

Printed in the Year, 1656.

Medicina Magnetica
by Dr. Christopher Irvine
of Bonshaw, Scotland
Printed in the Year 1656

“IF thou hast never so good a Magnet, and knowest not the use of it, thou bestowest thy labour in vain. We shall therefore add the use of it, that nothing may be wanting in this *Art*; And about it, being most needful, and asking little labour, there needs but few words: yet *one thing* is to be *noted* in the way; namely, That although the aforesaid *beams* do alwayes *flow* from the *bodie*, yet there are some parts out of which they flow more *copiously*: in one word, they are the *Emmunctories* by which the body is as it were cleansed, and the *spirit* doth accompany the superfluities; because these parts are more porous and spungie, it wandreth out more freely, finding a larger egress.” – C. Irvine, Book III, part XII, *Medicina Magnetica*



07:50 → 08:00 **Welcome and Introduction to New DJs** ⓘ

🕒 10m

08:00 → 10:45 **DMRadio-50L Progress Updates**

Design and Modeling Work for the 50L axion detector

Convener: Prof. Betty Young (Santa Clara University)

08:00 **DMRadio-50L Overview**

Speaker: Dr Jonathan Ouellet (MIT)

🕒 20m

08:20 **50L Magnet**

Speaker: Dr Alex (Sebastian) Leder (UC Berkeley)

🕒 20m

08:40 **Sheath and Pick-up Coupling**

Speaker: Chiara Salemi (MIT)

🕒 20m

09:00 **Sheath Modes and Loss**

Speaker: Alex Droster (UC Berkeley)

🕒 20m

09:20

Coffee Break

🕒 15m

09:35 **Thermal Modeling and Cryogenics**

Speaker: Dr Maria Simanovskala (Stanford)

🕒 20m

09:55 **Vibrations**

Speaker: Kalliroë Pappas (MIT)

🕒 10m

10:05 **Resonator Circuit Analysis**

Speaker: Jyotirmal (Joe) Singh (Stanford)

🕒 10m

10:15 **Estimated Sensitivity**

Speaker: Dr Saptarshi Chaudhuri (Princeton)

🕒 20m

10:35 **Discussion and Next Steps**

Speaker: Dr Dale LI (SLAC)

🕒 10m

10:45 → 11:00 **Snowmass2021 Letters of Interest: Snowmass Process, Opt-in to LOIs**

Convener: Prof. Lindley Winslow (MIT)

11:00 → 12:00

Lunch Break

🕒 1h