### **Presentation Title**

Subtitle

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#### **Outline**

Section 1

Section 2

Subsection name

blocktest

Beweise, Definitionen, Lemmata, Bemerkung

Zweispaltig

Bilder und Quellen

General principle of  $\mu$ SR

#### **Test Frametitle**

- Test
- Test 2
- Test 3

 $G_3'$ : Die Menge R ist ausdrückbar. WTF

Das hier: Description: Aufzählung ohne Punkte



1: RS-Flipflop



2: getaktetes RS-Flipflop

#### Blöcke

#### **Einfacher Blocktitel**

Einfacher Blocktext

### Beispielblocktitel

Beispielblocktext

### Warnungsblocktitel

Warnungsblocktext

#### **Beweise etc**

Proof.

Beweis

Lemma (XY – Ein Dual zu YX)

Lemma

Theorem (T – Nach Tarski)

Theorem

**Bemerkung** 

Bemerkung: zuerst

\newtheorem\*{bem}{Bemerkung}

in Präambel setzen!

- Einleitung
- aber Achtung!

- Einleitung
- daher
- · aber Achtung!

- Einleitung
- daher
- · aber Achtung!
- · also so und so

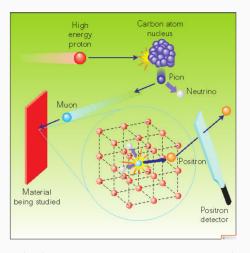
- Einleitung
- daher
- · aber Achtung!
- · also so und so
- Schlussfolgerung

## **Zweispaltige Sachen**



- 1. Start
- 2. Stopp

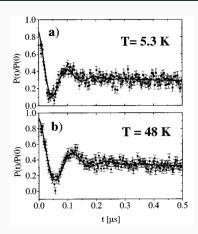
### General principle of $\mu$ SR



 $\label{eq:definition} \begin{tabular}{ll} Dalmas de Réotier, Pierre (2010): Introduction to muon spin rotation and relaxation ($\mu$SR) [Online]. Availible: $$ $$ http://inac.cea.fr/Pisp/pierre.dalmas-de-reotier/introduction_muSR.pdf $$$ 

# $\textbf{Coexistence of ferromagnetism and superconductivity in } \textbf{RuSr}_2\textbf{Gd}$

- ferromagnetic phase is homogenous on a microscopic scale
- it accounts for most of the sample volume
- magnetic order is not significantly modified at the onset of superconductivity



Time-resolved normalised muon-spin polarisation  $\frac{P(t)}{P(t=0)} \text{ at temperatures}$   $T=5.3K < T_{c,sc} \text{ and at}$   $T_{c,sc} < T=28K < T_{c,m} \text{ . The large}$  oscillatory component gives clear evidence for the 10 presence of a magnetically ordered state.

C. Bernhard, J. L. Tallon, Ch. Niedermayer, Th. Blasius, A. Golnik, E. Brücher, R. K. Kremer, D. R. Noakes, C. E. Stronach, and E. J. Ansaldo, Phys. Rev. **B** 59, 14099 (1999)

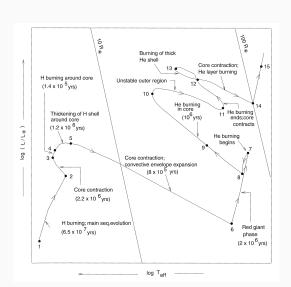
#### 5 - 6

He core is homogenous (convective mixing). It will be nearly isothermal.

More and more He is produced by shell burning, the core becomes more massive

At some point, core cannot support envelope mass anymore:

 $\Rightarrow$  core contracts, envelope expands



#### **Mathtest**

$$f(z) = \lim_{x \to \infty} \frac{\sin x}{x} = 0 \tag{1}$$

$$\binom{a}{n} = \frac{a!}{(a-n)!n!}$$
 (2)

$$\int (z)dz = \frac{1}{4} \left[ \int \frac{e^{ia(u+1)}}{u} du - \int \frac{e^{ia(u+1)}}{u+2} du \right]$$

$$z = 1 \Rightarrow u = 0 \xrightarrow{\frac{1}{4}} \left[ \underbrace{\frac{e^{iae^{i\varphi}}}{e^{i\varphi}} i\epsilon e^{i\varphi}}_{\rightarrow i} i\epsilon e^{i\varphi} d\varphi - \int_{\pi}^{0} \underbrace{\frac{e^{iaee^{i\varphi}}}{e^{i\varphi}+2} \underbrace{i\epsilon e^{i\varphi}}_{\rightarrow 0}}_{\downarrow 0} d\varphi \right]$$
(3)

2 + 2 = 4 some more space after this line please. (4)

#### **Citations and References**

#### Knollmann and Knebe 2009

#### (Berger and Colella 1989)



M. J. Berger and P. Colella. "Local adaptive mesh refinement for shock hydrodynamics". In: *Journal of Computational Physics* 82 (May 1989), pp. 64–84. DOI: 10.1016/0021–9991(89)90035–1.



S. R. Knollmann and A. Knebe. "AHF: Amiga's Halo Finder". In: *The Astrophysical Journal* 182 (June 2009), pp. 608–624. DOI: 10.1088/0067-0049/182/2/608. arXiv: 0904.3662.