

# FINAL SESSION COMMENTS

*Mike Poole*

## AIMS

1000 mA (multibunch)

100 mA (single bunch)

4 mm (gap)

PERFECT STABILISATION

ACCEPTABLE LIFETIME

PRACTICAL ENGINEERING

PREDICTABILITY

## ISSUES

**INTELLECTUAL**  **PRAGMATIC**

## IMPEDANCE

**Codes**

**Bench Mark**

**Measurements (!)**

**A priori confidence ?**

## BEAM

**Harmonic cavities**

**Fill patterns**

**Small gap/RW**

**High frequency effects (CSR?!)**

**Multiple instability interaction ?**

## TECHNIQUES

**Diagnostics (high frequency ?)**

**Feedback (future ?)**

## **FUTURE STEPS**

**Shared codes**

**FEL stabilisation effect (?!)**

**(Adjustable) impedance experiment**

**New cavities**

**New chamber materials**

**COLLABORATION**

# OPEN QUESTIONS (SINGLE BUNCH ISSUES)

*A Mosnier*

## 1. TMCI or RW

*Some rings don't see it - explanation ?*

## 2. TMCI = threshold a factor 20 below operating current for example

*inductive component suppression could help ?*

*(to slow down detuning)*

## 3. Numerous simulation codes

*Cross checking ? between labs*

*with the same data input*

## 4. Readdress the taper calculation

*Especially in 3D. What is the amplification factor ?*

## 5. Impact of small gap : never really studied.

*e.g. SPring 8 ? - never closed because of interlock problems*

*APS ?*