

Summary slide

For

Behaviors of ITER EHF FW under high heat flux for mock-ups manufactured by HIP joining technology

Jiming Chen¹

Southwestern Institute of Physics, Chengdu 610041, China

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1. The ITER EHF FW panel will have a surface heat load of $4.7\text{MW}/\text{m}^2$, its capability was demonstrated by small scale mock-ups made by HIP joining technology;
2. $12\times 12\text{mm}^2$ Be tiles and larger Be tile by castellation into this size are acceptable for the EHF FW panel.
3. Post-HHFT examination revealed the failure mechanism for mock-ups with larger Be tiles. For better performance, optimizing interlayer Cu film shall be done in future.
4. Mock-ups with artificial defects for acceptance evaluation were made and to be high heat flux tested to decide the production acceptance criteria.