REMODEL First Annual Meeting

9–10 September 2026 • King's College London

Venue: King's College London, Bush House (South)

Entrance: Bush House (North), 30 Aldwych, London WC2B 4BG

Main meeting room: Bush House Lecture Theatre 2, BH(S)4.04

Day 1 catering: Lunch and coffee in BH(S)1.02

Day 2 catering: Arrival coffee and lunch in BH(S)4.03

Advisory Board session: BH(S)4.03

Group dinner: Wednesday 9 September, 19:30 – Côte St Martin's Lane

Dinner address: 50–51 St Martin's Lane, London WC2N 4EA

Arrival & access

Please enter via the **Bush House (North) entrance**, accessible from the road entrance at the junction of Aldwych and Kingsway. On arrival, sign in at the reception desk, then take the lifts to Floor 4. Lecture Theatre 2, BH(S)4.04, is located to the left as you exit the lifts.

Meeting approach

Top-down and discussion-led.

The purpose of the meeting is to consider REMODEL as an integrated programme rather than as a collection of individual Work Packages. The technical sessions are therefore deliberately not presented in numerical Work Package order.

The discussion starts from the capabilities REMODEL ultimately aims to deliver and works backwards through the computational, meshing, geometry and AI technologies needed to enable them. This is intended to make the dependencies between Work Packages clearer and to encourage discussion around common requirements, interfaces and challenges.

Each Work Package session should therefore focus not only on progress to date, but also on what is needed from other parts of the programme, what constraints it places on them, and where closer integration or joint activity is required.

The technical programme is completed on Day 1, allowing Day 2 to focus on strategic discussion with the Advisory Board, industrial relevance, programme resources and wider operational priorities.

Throughout the meeting, the emphasis should be on discussion, integration and decisions that help shape the next year of the programme, rather than on progress reporting alone.

Work Package session format

Work Package sessions (45 min): approximately 25–30 minutes of concise presentation followed by 15–20 minutes of structured discussion.

Presentations should cover:

- progress and key outcomes from the previous year;
- the current position;
- priorities for the coming year; and
- important connections or dependencies with other Work Packages.

Discussion: each presenter should identify a small number of questions or topics they would particularly like the wider group to discuss, using the discussion to seek input from across the programme. These might include:

- technical challenges or decisions where wider input would be useful;
- dependencies on, or requirements from, other Work Packages;
- areas where closer collaboration is needed;
- uncertainties, risks or potential blockers;
- interfaces between different parts of the REMODEL workflow; and
- priorities or choices that may affect the wider programme.

Day 1

Wednesday 9 September

Time	Length	Session	Focus / format
13:15	15 min	**Opening: REMODEL Challenge & Meeting Approach**	The PI sets out the overarching REMODEL picture, including the long-term capability the programme is seeking to enable, how the main technical areas fit together, and the key challenges that connect them. The session should also explain the structure of the meeting and establish the discussion-led format, with emphasis on links and dependencies between Work Packages.
13:30	45 min	**Lunch**	Lunch for all attendees.
14:15	45 min	**WP5 – Multi-Physics Integration**	Begin with the end goal: the simulations and integrated capabilities REMODEL is seeking to enable. Discussion should identify the requirements this places on the wider programme.
15:00	45 min	**WP6 – Parallel / Exascale**	Establish the computational constraints within which the REMODEL workflow must operate, including scalability, communication, memory, partitioning, data movement and in-situ execution. Discussion should identify the implications for the other Work Packages.
15:45	45 min	**WP3 – Adaptive Meshing**	Review progress and plans for adaptive meshing, including the approaches required for solver-integrated and in-situ adaptation. Discussion should consider interfaces with mesh generation, geometry, parallelisation and the wider simulation workflow.
16:30	15 min	**Coffee Break**	Refreshments and informal discussion.
16:45	45 min	**WP2 – Hybrid Meshing**	Review progress and plans for hybrid mesh generation and associated meshing capabilities. Discussion should consider interaction with adaptation, geometry, boundary-layer requirements, robustness and operation within the wider REMODEL workflow.
17:30	45 min	**WP1 – Geometry Handling**	Consider the geometry information, operations and interfaces required to support the meshing and adaptation activities, together with their operation within a distributed REMODEL workflow.
18:15	45 min	**WP4 – AI for Mesh Generation**	Consider where AI can provide meaningful benefit across geometry, meshing, adaptation, parallel workflows and simulation. Discussion should identify realistic opportunities and priorities for the coming year.
19:00		**Day 1 Close**	Close of the formal programme, allowing time to return to hotels before dinner.
19:30		**Group Dinner**	Informal programme dinner at Côte St Martin's Lane

Day 2

Thursday 10 September

Time	Length	Session	Focus / format
09:00	15 min	**Arrival & Coffee**	Coffee and informal discussion before the Advisory Board meeting.
09:15	165 min	**Advisory Board Meeting**	Strategic discussion with the Advisory Board. The session should consider the integrated REMODEL position and invite the Board to challenge the programme's technical direction, priorities, assumptions, risks, opportunities and overall route towards its longer-term objectives.
12:00	60 min	**Lunch**	Lunch for all attendees.
13:00	10 min	**Group photo**	Group photo outside Bush House.
13:10	45 min	**Use of AI Across the REMODEL Team**	Internal discussion on how generative AI and related tools are currently being used across the team, including research, coding, analysis, writing and administration. Discussion should consider useful applications, limitations, verification, research integrity, confidentiality and opportunities to share good practice.
13:55	45 min	**Collaboration, Software & GitHub/GitLab**	Internal discussion on practical cross-institution collaboration and software development. Topics should include repository organisation, access, documentation, code review, testing, software sharing and effective cross-WP collaboration. The session should conclude with a small number of agreed working practices or actions.
14:40	5 min	**Decisions, Actions & Next Steps**	Final whole-team discussion confirming the major outcomes of the meeting, decisions made, actions required, action owners, cross-WP dependencies, priorities for the coming year and key upcoming milestones.
end		**Meeting Close**	Formal close of the First Annual Meeting.