Script: Semi-Lagrangian Rhapsody

Act 1

Scene 1 (Nicolas leaves - Thorwald joins and remote sensing group turns to electricity stuff)
Scene 2 (writing retreat to Dorset/Arran)
Scene 3 (No success at hybrid seminar and break up!)

## \*\*\*INTERVAL\*\*\*

Act 2 Scene 4 (Eddy Mercury fails alone, Jedward) Scene 5 (Eddy Mercury rejoins QUEEN) Scene 6 (The live aid concert - AMS)

Songs: Another one bites the dust I want a skew-T (I want to break free) Under pressure Radar (Friday) We will shock you (We will rock you) Semi-Lagrangian Rhapsody (Bohemian Rhapsody)

#### Act 1

#### Scene 1

Character list: Narrator (Wendy) Helen Keith Hilary Nicolas John Methven Ed Hawkins Thorwald/Eddy

Research group are in a hybrid in-person/Teams/zoom call

Narrator: Hello, it's me Wendy, your favourite SCENARIO DTP administrator here. I'm currently working from home on the Isle of Wight and it looks like I've timed it right for good weather. After work swims maybe? How has your week been? This week's SCENARIO update is full to the brim! To start, we join a research group at their weekly meeting in the Meteorology building at the University of Reading.. Let me introduce them...

Here we have Helen Dacre, the babysitter of a group of monkeys in the department, otherwise known as the PhD tutor (Helen *(\*\*talking to student with face blurred out\*\*)*: No, organising the panto is not a good enough reason for not having sorted out your monitoring committee yet)

Keith Shine, the highly respected climate and radiation scientist, lecturer, and all-round good *fellow (\*\*screenshot of email\*\**), and (\*\*Keith framing fellow email or something\*\*\*)

Hilary Weller our resident numerical modeller trying to formulate the perfect advection scheme, hopefully making a finite difference in our weather models, with some.. perplexing email habits (\*\*illuminati meme music over reply to met runners email\*\*)

Things are about to get turbulent... Our team has been waiting for the final group member, Nicolas Bellouin, to arrive for an hour...

\*\*Helen, Keith and Hilary in meeting looking at their watches\*\*

Hilary: Where is Nicolas?

Nicolas (\*\**joins call in a rush*\*\*): Hello Helen, Keith and Hilary, how are you all doing? Sorry I am late, I got mixed up with ze time zones

Helen: Time zones? Aren't you in Reading?

Nicolas: (\*\*Awkwardly ignores question\*\*) Oh errrr....

Keith: Anyway... So now we are all here, shall we get started? Nicolas, do you want to share what you've been working on this week?

Nicolas: Bonjour à tous (Hello everyone), oui I did have something I wanted to share with the group, if you don't mind. I am sorry it isn't finished yet because I have been super busy with SCENARIO director stuff this week, but I would like to hear what you guys think. Today, I will be sharing my latest thoughts about dust in the Saha-....

\*\*Audible groaning from group members\*\*

Nicolas: Quoi!? What?

Hilary: not again... we've waited an hour for you to talk about dust??

Keith (\*\*starts while groan fades\*\*): Sorry Nicolas, but you know our opinion on dust... this has got to stop.

Nicolas: Sacré bleu! What is the problem mes amis?

Helen: Let's face it Nicolas, you are taking the group in the wrong direction. We HATE dust! We've made a group decision to move away from dust... so we're going to have to ask you to leave.

Keith: We want to study something with more shock factor - perhaps atmospheric electricity?

Nicolas: Ah. Well that blows more than Saharan dust, but it seems like the dust has settled... you're right, we should break up. To be fair, it's dust in time for me to leave for my new role in Paris. Au revoir! Sahara-nara

\*\*\*Song: Another One Bites the Dust\*\*\*

Narrator: And that was that, Nicolas was gone with the wind... and all of a sudden our protagonists are left without an integral member of their group. What ever shall they do? Well they need to dust themselves off quickly, because if they do not find a fourth member, the group will be relegated to (\*\**dramatic pause, dramatic camera angle change*\*\*) the dreaded Lyle building (\*\**dun dun duuuunnnn*\*\*)

Hilary: Well that wasn't so bad. But now he's gone, we need to find a replacement so we can stay in Met! What shall we do for recruitment?

Helen: We don't want just any old person joining our group - we only want the most talented researcher! You know what that means? We could host an episode of Mets factor? (*Jazz hands.*)

\*\*Talent show montage - All singing it's Raining Men\*\*

Keith: Hi hi we're your research group Helen: and have we got a job for you Hilary: You'd better listen Keith: Get ready, Helen: all you lonely researchers Hilary: And leave those thermometers at home Keith: Alright

Hilary: Contestant 1 come in (ooh come in), time is running low (right now girls)

\*\*Katrina and the Rossby waves\*\* Katrina: According to all sources All: (\*\* whispers\*\*) What sources now? And the Rossby waves: Climate change is all fake newsssss Katrina and the rossby waves: 'cause this is not the first time-

Keith: Please just get out right nowww (just get outtt) Hilary: It's time for the next contestant Helen: You'd better start making sense (start raining sense)

\*\*Wet Wet Wet\*\* Wet 1: We'll make some sense! Homogeneous nucleation Wet wet wet (in unison): Conspiracy!

Helen: I'm gonna kick you out and lets see who's next Keith: Who else is trying out for met???

\*\*Weather girls\*\*

Weather girls: The weather girls. Hallelujah! Weather girls: We study clouds, precipitation Weather girls: High, low, rain and snow Weather girls: Just the one parameterisation scheme

Helen: That won't make it in Nature Keith: Oversimplification! Hilary: Next up take to us to heaven and show us what we need to see

\*\*Jedward\*\*

Jedward: We are John and Edward. We'll rearrange your mind. Jedward: So that each and every modelled quiff can reach into the sky \*\*\**Music stops*\*\*\* Hilary: Wait! Who **are** you!?!?!??!!?

John Methven: I'm John Methven Ed Hawkins: I'm Ed Hawkins MBE! You may recognise me as the face of the climate stripe.... \*\**A hollow laugh from John*\*\* John & Ed: And together we're Jedward! \*\*jazz hands\*\* Helen: This is.. very disturbing. Please just go (\*\**points at door*\*\*)

\*\**Music restarts*\*\* \*\**Thorwald Stein*\*\* Thorwald: I'm Thorwald Stein, Thorwald: a professor, of electricity Thorwald: (And clouds!), I'm Thorwald Stein, Keith: Hallelujah! We've found our guy! Helen, Hilary, Keith: Amen!

\*\*Music fades\*\*

Thorwald: Hello, my name is Thor, and my area of interest is atmospheric electricity. Don't you agree that it just charges you up?

\*\*Group members look at each other in (happy) shock.\*\*

Keith: I didn't like it... I LOVED IT!! You've made it through to judges houses, which is something that happens with a return period of 10 years. We'd love for you to join our group.

Hilary: And we can stay in Met!!

Helen: Electrostatically attracting! It's amazing! And thank god we don't have to worry about stairs in Lyle!

\*\*Email screenshots of Met lift being broken - Enter lift men and with Magic FM playing very loud. Expletives. Something like George Michael, Whitney Houston, Take That, Christine Aguilera, Titanic theme - for how the lift always dies.\*\*

\*\*Group congratulates each other\*\*

Hilary: Hhhm, Thor you say? It seems that ORCiD ID name has already been taken \*\*\*(*flashes to screenshot of Thor's ORCiD ID profile*)\*\*\*. You'll be needing a research name. How about Godunov, although that's probably not good-enough... or Rayleigh, oh that's not rayleigh good... or Mie, but that isn't you. How about you cascade into Eddy Mercury instead?

Thor/Eddy: ...Okay...

Keith: Looking forward to working with you Eddy! What sort of research do you do?

Eddy: Well I want to work on Quasi-Useful atmosphEric Electricity Nowcasting.

Hilary: That's a great name for a research group! QUEEN!

(\*\*QUEEN acronym on screen\*\*)

Eddy: ...you sure??

\*\*Intense slide change - QUEEN - Eddy holding lightning rod/WCD stick like Freddie with mic stick - soundbite of Flash! AAAAaaaaaa - thunder clap\*\*

## Scene 2

Narrator (Wendy) Eddy Helen Keith Hilary Students 1-4 Chris Scott

Narrator: We join our newly-formed research group, QUEEN, on a writing retreat, where they hope to come up with some new research ideas. Much to their dismay they have booked the same hotel as the MSc students on their Dorset field trip. I hope they don't forget to fill in the new version of the expenses form!

Eddy: These MSc students are so annoying! And the weather is terrible!!

Keith: I can't believe I'm missing my Sunday morning pilates class for this

\*\*Students look clueless and don't know how to operate instruments\*\*

Student 1: \*\**Swirling swirly boi - Whirling psychrometer*\*\* hOw ArE yOu SuPpOsEd To ReAd this swirly whirly boi????

Eddy: It's a whirling psychrometer!

Student 2: Why is my cup anemometer not moving? \*\*blows to make it spin\*\*

Eddy: Imbecile. It's all calm.

Student 3: I've just tried to catch some fog, but I mist :(

Student 4: My thermometer doesn't seem to be working. Has it not warmed up yet?

Eddy: Chill! We are measuring air temperature, not your body temperature. It's all cool...

Student 1: (\*\* Sighs\*\*) What's the point of being here if we can't go to the pub?

Keith: Oh no, watch out! Don't let Chris Scott see you!

Chris Scott: Oh I'm so glad you're here Eddy et al.,! As you can see we no longer have to do a virtual MSc field tr- sorry MSc virtual field trip- now we have a blended MSc field trip. No wait we don't make MSc students into smoothies - MSc blended field trip. Anyway, since you're here, can you help us release the radiosonde?

\*\*Research group looks disgruntled\*\*

Helen: Fine... but after this we need to get back to work!

Chris Scott: Excellent, go on then (\*\*hands Keith the balloon\*\*). Between you and me, helium is very hard to come by these days, you can only get it if Nicki Robinson sends a *strongly* worded email - so I can't be wasting it on these useless students!

\*\*Keith on a chair, releasing radiosonde\*\*
(\*\*Audience participation\*\*)
Eddy: Higher Keith
\*\*\*Keith gets higher in pitch\*\*\*
Keith: How's this?
Eddy and Helen: We meant the radiosonde...
Chris: Excuse me, have you been inhaling helium? No one tell Nicki about this!! (\*\*looking
scared to death\*\*)

\*\*\*Keith gets higher in height\*\* Eddy, Helen, Hilary and students: Higher! \*\*\*Keith gets higher in height\*\* Everyone including audience: Higher !!!

\*\*Radiosonde launch \*\*

\*\*\* Eddy notices the balloon and gets an idea (makes idea face)\*\*\*

Keith: Excellent - Let's look at the resulting skew T!

\*\*Instrumental of song begins\*\*

Student 2: What's a Skew T?

Student 3: I think he means a tephigram.

Hilary: No we definitely mean skew-T!

\*\*\*Song: I want a skew-T \*\*\* people all using instruments - Mainly have students singing and confused.

Eddy: The radiosonde launch has given me a brilliant idea! We could design a convection scheme for lightning with semi-Lagrangian advection, so following fluid parcels just like that rising radiosonde.

\*\*Group mulls this over for a couple of seconds\*\*

Helen: That's an amazing idea!

Keith: A semi-Lagrangian convection scheme for lightning!? This will be enlightening!

Hilary: Some might say... impossible (\*\* Eyeballs the camera\*\*)

Helen: According to protocol, we have to present this in a departmental seminar ASAP! Our Semi-Lagrangian Rhapsody!

\*\*Research group jumps up as a group and punches the air (Anchorman style) and freeze frame. Narrator finishes the scene talking over freeze frame.\*\*

\*\*Chris Scott interrupts\*\*

Chris: Bad news chaps, it seems the radiosonde got stuck in a tree (\*\*screenshot of skew-T plot that only goes up to 990 hPa\*\*). How are the students going to write up their fieldwork report with this?

Narrator (Wendy): After having no choice but to help with the field work, Eddy has come up with the beginnings of a genius idea. With the rest of the group onboard, they head back to Reading in high spirits (although not from the pub), with an energy that can only be described as electric... although this was somewhat dampened by the complexity of the new expenses form. I did warn them.

#### Scene 3

Narrator (Wendy) Eddy Helen Keith Hilary Robert Lee (In-person) Audience member Maarten Ambaum Virtual audience member Javier I pad

Narrator: QUEEN are ready to give their departmental seminar, which will be held in the dreaded hybrid format. The audience are listening attentively in GU01 whilst the online attendees are half-listening in their pyjamas, simultaneously running their code and responding to emails.

Helen: Today's the day! I'm actually feeling quite nervous, I am really feeling the pressure (\*\*looks at a barometer\*\*)

Keith: Don't worry it'll be fine; as we're still hybrid we can just ignore the remote viewer questions and pretend Teams was broken

\*\*\*Song: under pressure\*\*\*

Robert Lee: (\*\*Interrupts song\*\*) Sorry guys, we need to get started

Eddy: Come on, we can do this!

Robert Lee: (\*\**Addressing audience*\*\*) For those of you joining online, please make sure that all cameras and mics are off to reduce background noise and save bandwi-

\*\*Javier's IPAD member is on a phone call and doesn't know they're not muted \*\*

Javier's I Pad: Oh hi... yeah..., I'm just in the weekly seminar, can I call you back later?

Robert Lee: (\*\*Shouts\*\*) Excuse me! Please make sure your mic is off when you join the meeting!

\*\*Awkward silence\*\*

Robert Lee: (\*\*Composes himself\*\*) Thanks for joining everyone. We will have to wait a couple of minutes for latecomers before starting since some of us follow Reading standard time, which is three minutes behind the more traditional Greenwich Mean Time

\*\*one minute later...\*\*

Eddy: Before we start, we need a stick to present, where is it? \*\*\* *Stick is obviously behind person*\*\*\* Robert Lee: It's behind you Eddy: i'm sorry, where is it? Robert Lee: It's behind you Eddy: I'm sorry where?? Audience: Its behind you

Robert Lee: Right it is 3 past the hour, so we had better get started. Today we have QUEEN presenting! Are you ready to get started?

\*\*Presentation on screen (slide 1 of 250 on title slide)\*\*

# \*\*Audible groaning\*\*

Hilary: Yes. Hello all, thank you for having us, we are QUEEN and are here to talk about our revolutionary Semi-Lagrangian convection scheme for lightning. We have called it Semi-Lagrangian Rhapsody

\*\*Murmurings in the audience of the word Rhapsody\*\*

Eddy: A rhapsody, a one-movement work that is episodic yet integrated, free-flowing in structure just like an atmospheric fluid. Wikipedia states a rhapsody features a range of highly contrasted moods, colour, and tonality.

Audience member (whispers to person next to them): Did he say Wikipedia?

Keith: Here we feature a range of highly contrasted modes, clouds and vorticity oooohhhhhh

Eddy: So here is how it works... (\*\*Waves stick at board\*\*) we will align each cloud in the atmosphere with its own three-dimensional grid, and calculate the departure point of an air parcel arriving at each grid point at the end of each model time step

Helen: Coupled with quadruple-moment microphysics and turbulence parameterizations, this will form the basis of our semi-Lagrangian convection scheme for lightning - simple, am I right?

Eddy: -But let's not get ahead of ourselves. Let's start with an introduction. What is a cloud?

\*\*Audience groans\*\*

\*\*One eternity later (spongebob)\*\*

\*\*Audience member (Tom Frame) snores himself awake.\*\*

Eddy: (\*\*Bows\*\*) Thank you all for listening, are there any questions?

Audience member: I don't have a question, just a comment (\*\**everyone eyerolls*\*\*). Your presentation made no sense to me.

Maarten Ambaum: Agreed, I think you've lost your way here. You seem to have forgotten the fundamentals of atmospheric physics. Reading MY papers should help or perhaps the second edition of my book

\*\*Maarten looks at camera and proudly shows off book\*\*

Virtual audience member: Hello! Is this a bad time to say that the mic on the webcam doesn't appear to be working - It's been muted this entire time! And you were in presenter mode...

Eddy: You can't be serious!?

Audience member: I'm sorry, but I think this work is too long and experimental. I think you need to go back to the drawing board!

\*\*Murmurings of agreement in the audience\*\*

Helen: (\*\**Frantic and trying to take control*\*\*) Right stop! No one can leave this room until they have asked a question!!

\*\*Awkward silence\*\*

Robert Lee: Sooo, err... thanks everyone for joining... As usual, meet in the foyer in 5 minutes to take QUEEN to lunch...(\*\*looks at watch\*\*) if the SCR is still open, that is.

\*\*Group go to SCR to drown sorrows\*\*

Narrator: After their presentation didn't go... quite as they planned, our beloved group drown their sorrows at the SCR, where, unfortunately, no one decided to join them, including Robert Lee. Oh dear. I would have joined them but I'm on the Isle of Wight! (\*\*sad face\*\*)

Keith: Did that just happen, or is this a fantasy?

Hilary: I can't believe they didn't like it! I thought we'd shock them, blow them away...

Keith: I know! Our presentation was awful, and to make things worse we can't even have anything to eat away our problems with! Park House have run out of chips AGAIN! Fish and crisps anyone? (\*\*Grabs mayonnaise\*\*) What the hellman? Forget the petrol shortage, this is the final straw, this is the worst day ever!

\*\*Keith sobs and is comforted by Hilary and Helen\*\*

Helen: (\*\**Passes Keith a napkin*\*\*) The world just wasn't ready to hear Eddy's radical ideas. (\*\**Sighs*\*\*) In the future we shouldn't let Eddy get so carried away with our work..

\*\*Group members nod in agreement\*\*

Eddy: Well this is a bolt from the blue! You all seemed to like my ideas before?

Hilary: Ah well, never mind. I've been thinking, perhaps we should consider taking a multi-fluid approach to convection instead?

Eddy: Oh don't be so ridiculous Hilary! (\*\*Slams table\*\*) That would never work! (\*\*Exasperated\*\*) No one appreciates my striking research ideas, including you lot. I'm off!

## \*\*Remaining group members shake their heads as Eddy walks away\*\*

Narrator: As Eddy propagates away and dissipates, QUEEN are left feeling like all their energy left with Eddy. They Rossby wave goodbye to him. What will they do now? Well, if it's any comfort, I am hosting a SCENARIO coffee break now where the virtual kettle will be on, and we could have a chat about this. I'd better go grab a cup of tea.

## Act 2

## Scene 4

Narrator (Wendy) Eddy John Methven Ed Hawkins

Narrator: Hello all, and welcome back to this week's SCENARIO update! In the first part of the email, we saw QUEEN, our research group, develop a semi-Lagrangian convection scheme for lightning. Perhaps not shockingly, their semi-Lagrangian Rhapsody was not well received by the research community at the University of Reading's Department of Meteorology. I think it's fair to say that this caused some friction in the group, which QUEEN had overlooked in their equations. We now rejoin Eddy Mercury, who after realising his (geo)potential, has decided to leave QUEEN in the dust and set out on his own adventure.

Eddy: (\*\*Sitting at desk in front of laptop\*\*) I don't need them! This was all my idea anyway, why do I need co-authors? I'll publish in Nature and show them!

Narrator: Unfortunately Eddy's self-confidence was somewhat misplaced as Nature automatically rejected his paper within 3 minutes of submission.

\*\*\*Simon Lee makes a smug face and then disappears into the darkness with his paper behind him \*\*\*



Eddy: Damn! (\*\**Closes laptop forcefully*\*\*) I hate research! Maybe I should get a job in the real world working in operations?

Narrator: Oh dear, poor Eddy. The life of a researcher isn't for everyone. Eddy begins the process of applying for jobs and to his surprise, after a short 5-minute interview, Eddy secures a

job in the radar group at the Oxford Brookes Met Service. Little did Eddy know, some old friends also work in this department...

\*\*Jedward jump into frame\*\*

John: Hi! I'm John Methven

Ed: Hi, it's me, Ed Hawkins MBE, you may recog-

\*\*John does classic 'John laugh' and eyeballs camera annoyed\*\*

John & Ed: And together we're Jedward! \*\* jazz hands\*\*

Ed H: Top of the morning to ya! Fancy seeing you here Eddy! Aren't you supposed to be with QUEEN back in Reading?

\*\*Eddy looks shocked and says nothing for a spicy minute\*\*

Eddy: Oh, hello....you guys work here?

John: Oh yes, and great news! You're going to be working \*with\* us to develop the next big innovation in convection permitting models! We have a state of the art 1-dimensional cloud model with a horizontal resolution of one Oxfordshire. Maximum CAPE (wearing a cape), minimum detrainment, we guarantee super deep moist convection.

Eddy: That is quite deep...

Ed: And didn't I mention, it's modelled on a flat, non-rotating, aqua planet. And it's got... Ice ice baby!

\*\*Show photos of John and Ed actual modelling on an aqua planet. Photoshop John and Ed's faces onto models with quiffs.\*\*

Eddy: Oh?

John: But... as a newbie this week you will be helping us transfer our radar plots from it's raw format in Microsoft Paint to Excel!!

\*\*Ridiculous script flashes up on screen\*\*

Eddy: Blimey... (\*\*speaking to himself\*\*) How am I supposed to transfer radar plots in Excel after every 5-minute scan... \*\*\*sighs\*\*\* Work in operations is difficult, but at least I still have my dignity-

\*\*\*Jedward does annoying jedward-y things (a lot of high fiving) and start singing\*\*\* \*\*\*Radar\*\*\*

Eddy: Wow! Life is hard with these clowns. I need help! It's snow joke...but I suppose I need to see how my first week goes, I'm sure it will get better.

Narrator: However, things did not get better. Thanks to a *horrifying* admin error, Jedward were appointed as covid officers for the Oxford Brookes Met service buildings. After only a few shifts of operational work, Jedward pull Eddy aside to inform him of their latest office requirements. With government regulations easing, the Health & Safety department at the Oxford Brookes Met Service have dropped the requirement of face coverings at the workplace. As a replacement, Jedward insist anyone working in their team must quiff their hair.

## \*\*\*Funny photo of Freddie Mercury with a quiff\*\*\*

Eddy: ARGHHHHHHHHHHHH ENOUGH!!! I've had it up to hair with this stupid job! (\*\*Jedward look upset and confused\*\*) I want out! I miss research, and I want to be working with QUEEN! But will they take me back now? The Semi-Lagrangian Rhapsody was my pride and joy, I should have stayed and given it more work. I hope my actions haven't shut me out from the world of research forever...

Narrator: Eddy is in a state of flux, he is at a lightning fork in the road. Working with Jedward has proved to be too straining for Eddy, it was shear stress. It seems Eddy has intentions of returning to research, and rejoining QUEEN on their quest to improve the modelling of atmospheric electricity - but will they take him back, or is this just another flash in the pan?

## Scene 5

Narrator Eddy Keith Helen Hilary Sue Graydof Nicki Robinson

Narrator: We now join the other ex-group members back in Reading. Since Eddy left, Helen, Keith and Hilary have been relocated to the fifth floor of the Lyle building, and they are not best pleased.

\*\*Helen and Hilary are at their desks working when Keith walks into the office\*\*

Helen: (\*\*Looks at watch\*\*) You're in quite late today aren't you Keith? It's 3pm!

Keith: Ah yes, well I was actually here 6 and a half hours ago, but I've been trapped in the lift

\*\*Screenshots of the (literal) thousands of Lyle lift emails popping up - Windows error noise\*\*

Hilary: Haha classic! Everyone knows to never get in the lift, it's a death trap!

Helen: (\*\*Chuckling\*\*) Oh dear, Eddy really has left us in the lurch hasn't he?

Keith: (\*\*Sigh\*\*) Oh I wonder what Eddy has been up to? I do miss his wacky ideas, I genuinely believe that with a bit more work our Semi-Lagrangian Rhapsody just might have worked.

Helen: Didn't he go off to Oxford Brookes Met for an operational post? Talk about a fall from grace..

\*\*Group members scoff\*\*

\*\*Eddy enters sheepishly\*\*

Eddy: Hello!

Hilary: Eddy? What are you doing here? How did you even manage to find us out here in Lyle?

Eddy: Hi guys. (\*\*Out of breath\*\*) Sorry give me a sec, I've just walked up 5 flights of stairs... (\*\*Composes himself\*\*) Right, I just wanted to come in today to let you know that I deeply regret my behaviour. I was selfish and childish - my error margins were too great. I don't expect you to take me back, but I just wanted to let you know that QUEEN was the highlight of my life. I wish the three of you the best of luck with all your future endeavours.

Hilary: That's very kind of you to say Eddy... How is life at the Oxford Brookes Met service?

Eddy: (\*\*Fake laugh\*\*) Not great Hilary... Working in operations was dreadful, and being forced to collaborate with Jedward was a real low point. Who wants to work with Jedward forever? I miss research, and I've realised that I can't make it on my own. I wish I could work here again, with you guys, but I know that isn't possible...

\*\*Eddy looks expectantly at audience and group members\*\*

\*\*Group members look at each other\*\*

Keith: You want to work with us again?

Eddy: I mean, (\*\*Leans on wall/cupboard/door pretending to be casual\*\*) I'm really not that bothered, but if that's what you want I suppose it would be okay with me

Helen: (\*\*Sees right through this manipulation\*\*) Why would we take you back? You ditched us just as things got tough, you chickened out!

Eddy: (\*\*Drops casual act\*\*) Oh I know, I'm so sorry, it won't happen again I promise! Don't let our Semi-Lagrangian Rhapsody turn out to be a lot of hot air... this reunion will re-charge our research careers! (\*\*whispers to audience\*\*) Also I'm cleverer than all of them so they kinda need me

Hilary: (\*\*Addressing group \*\*) Hmmm, what do you reckon guys? Should we take Eddy back?

Helen: I don't think so

Hilary: Oh come on, he said sorry! (\*\*Addressing audience\*\*) Should we take Eddy back?

Eddy: -Oh yes they should!! (\*\*Cue audience to say yes\*\*)

\*\*Helen, Keith and Hilary look somewhat disgruntled by this\*\*

Helen and Keith : Oh no we shouldn't

Audience: Oh yes you should

\*\*Helen and Hilary smirk at each other\*\*

Keith: Oh no we sh-

Helen: Only joking Eddy, of course we'll take you back!

\*\*Helen gives Keith a piercing look\*\*

Keith: Sorry, my bad, I was really getting into that... anyway, it's great to have you back Eddy. Let's work on OUR semi-Lagrangian Rhapsody!

Hilary: (\*\*mumbles quietly\*\*) and it means we can get our office back in Met!

Eddy: Fantastic! So where do we start then? I have some ideas (reveals scroll of workings)

Helen: Of course you do...

Narrator: So Eddy has recirculated back into the research group, how lovely! We join QUEEN now that they are back in the Met building. The team have been working hard, and are taking a well-deserved coffee break. As luck would have it, a prominent scientist, Sue Graydof, is in the coffee area attempting to find a presenter from the department for the upcoming AMS conference. This would be the highlight of anyone's career... but still dealing with the trauma from their last terrible presentation, will QUEEN risk taking the plunge again?

Sue Graydof: (\*\*putting up a poster and talking to herself\*\*) ow I do hope we find an excellent presentation in time, that sting jet presentation last year from that odd American singing about some DOROTHY will be hard to live up to-

Nicki: Excuse me! What do you think you're doing in my coffee room, you can't put that up there... You have to email met-coffeeroomposters to get your poster approved... by me!

\*\*Sue shakes this off and continues putting the poster up - but is interrupted by QUEEN who are reading the poster over her shoulder\*\*

Helen, Keith and Hilary: Hey Sue Graydof, Hey Sue Graydof, Hey Sue Graydof, Sue , SUE ,SUE ,SUE , SUE , SUE

Sue G: (\*\*Takes a deep breath\*\*) ..... yes? (\*\*Slow and quiet\*\*)

Hilary: Sure looks like an interesting poster you're putting up there

Helen: (\*\*Talking to group \*\*) Are you thinking what I'm thinking?

Sue G: No no no absolutely not! Reading has a good reputation and we're not going to let you lot ruin our name-

\*\*QUEEN start stomping to we will rock you: stomp stomp clap\*\*

Sue G: (\*\**Exasperated*\*\*) No no no no! Stop this! You think I would consider you after your shocking performance at the departmental seminar? Who even let you back into the Met building?

\*\*Crowd appears in the coffee area\*\*

\*\*\*Song: We will shock you\*\*\*

Crowd: \*\*Cheering\*\*

\*\*QUEEN approach Sue G\*\*

Sue G: ...That was actually not terrible, but I'm sorry, you're too much of a liability.

Crowd: \*\*Boos\*\*

Sue G: Okay okay! Fine, you convinced me with the power of song and peer pressure - for that reason, I will put you forward for AMS. Fortunately for you, we've had no other applicants.

Eddy: Yes!!! No one can stop us now, cause we're having a good time (\*\*wholesome moment\*\*).

## \*\*QUEEN cheers\*\*

Narrator: And just like that, with the power of song stronger than any sting jet that has ever been studied, Sue Graydof was finally convinced and offered them the place at AMS. Yet another expenses form they'll have to fill in!

# Scene 6

AMS Host Narrator Eddy Helen Keith Hilary Sue G

Narrator (Wendy): We join the AMS conference just in time to watch QUEEN present their Semi-Lagrangian Rhapsody to the worldwide meteorological community. But how well will it be received this time? Will all of their hard work pay off? Speaking of conferences, don't forget to apply for the Joint DTP conference! Anyway, back to the story.

AMS host: Welcome back to the 102nd AMS Annual Meeting YEEhAW in Texas Amurica! (\*\*guns go off\*\*) And now from Reading (Reeding) Berkshire (Berk-shire), INgurland, we have Queen- wait what, why is the Queen of England here?!? Is she searching for Harry (\*\*Sue Graydof whispers in ear\*\*) Oh no sorry, my apologies, its just another terrible research group acronym... Anyway, take it away QUEEN!

Eddy: Hello distinguished guests, and those that aren't. It is our great honour to be here at AMS, to tell you about our revolutionary Semi-Lagrangian convection scheme for lightning.

Helen: This work has involved a lot of blood, sweat and tears, but our convective parameterization is now ready to take the world by storm

Hilary: Our semi-Lagrangian approach to convective parameterizations is unorthodox to say the least, but you can't deny our bravery (\*\*winks at audience\*\*)

Keith: So, how does this parameterization scheme work? Let us take you on a journey...

\*\*\*Song: Bohemian Rhapsody\*\*\*

\*\*Standing ovation from crowd\*\*

AMS host: Yeehaw! Ya'll that was awesome!

\*\*QUEEN smile and bow for audience\*\*

Sue Graydof: Wow, I can't believe you've done it. You've turned your semi-lagrangian tragedy into a semi-lagrangian rhapsody!

\*\*More cheering\*\*

Narrator: Amazing! I hope you enjoyed that presentation as much as I did. I think you'll agree that QUEEN have really outdone themselves this time, but, here is where our story ends. QUEEN went on to publish their work in Nature (\*\**Screenshot of semi-Lagrangian convection scheme in Nature article*\*\*) and integrated their convection scheme into the operational MetUM. QUEEN have truly revolutionised the field of convection parameterizations forever.

\*\*Freeze on picture of QUEEN standing together and smiling\*\*

Narrator: (\*\**Cute clip of Wendy typing at her desk*\*\*) What a fantastic story of human ingenuity, perseverance and courage. I think there are quite a few life lessons to be learnt here - primarily, that you should never get in the Lyle building lift. This has been your weekly SCENARIO update, best wishes, Wendy. (\*\**Wendy has a restful smile, gently closes laptop, and looks at camera*\*\*)

THE END!