

TRIP REPORT

# ELEKTRO- MANGNETIK FIELD



BY TOM JONES

I was standing at the top of the nightclub, and I started to understand I was inside a whale. It sort of curved up and away from where the DJ was spinning drum and bass and formed the mouth of the beast. This would be an expensive floor to put in a building. But as it was just grass underneath, it was an accident of topography.

The wall below the DJ had cuts of red bar lights that started to look like the throat of the animal as the room filled with smoke. Above the DJ, the giant jellyfish, which I had learned from an off-hand remark were made of 200 PCBs each, looked like eyes. With the shape of the tent, the effect was complete. This was a whale.

The mouth of the whale extended from the biotech lab I had gotten to by walking through a tower of gas flares. I hadn't figured out how to activate the equipment in the biotech lab, after 3 days in a field I was tired, but there were intrepid hackers figuring out how to get control of the biotech labs systems.



I hadn't wandered into an Ian M. Banks novel; I was at Electromagnetic Field.

Electromagnetic Field is the UK's only camping-based hacking and making festival. It is a weekend long celebration of technology, art, and the human desire to make the world much more interesting. The whale mouth was part of Null Sector, the art installation, escape room, night club that was become a staple of EMF.



EMF has everything you would expect from a festival, there is camping in the wonderful English summer weather with the amenities you would expect: toilets, showers, food vendors, a (free) electronic hackable badge, and mains, power, and gigabit Internet to your tent.

EMF is a special place with a lot going on, it is impossible to see everything during the event.

## Festival Organized Content

The festival follows a conference format — there are talks and workshops. 2022 saw 3 tracks of talks, in tents seating between 500 and 1,000



people and 5 concurrent workshop tracks. To extenuate the "hallway track" there are dedicated tents set aside to be used as a lounge.

Talks range from technical topics to explorations of the Anthropocene environment and psychology and the arts. Speakers include world experts on particular systems and hobbyists that have dug deep into how things work. There were featured talks this year on security issues and an accidental "train track" where 4 of the top 10 rated talks ended up being on railways.

Talks are pitched towards a technical audience, but as we all have our own specialties, they were approachable for a layperson in any particular field.

In the evenings, the talk tents were taken over, the main stage featured interactive content like PowerPoint karaoke on Saturday evening. EMF ran a film festival on the smaller stage, and it was standing-room-only every night. In addition to the night club in Null Sector there were music acts on Stage B each evening. Stage B acts like Look Mum No Computer and AA Battery performing music on home built synthesizers and Gameboys. Music for technology people.

Workshops were an opportunity to learn something completely new. As a hacker festival there were technical, hardware related workshops. You could learn to solder for the first time or learn how to sew soft wearable electronic circuits, or if this wasn't your first hacker camp you could sit in on a workshop by the badge team and be shown how they did the PCB layout.

Workshops also touched softer subjects drawing activities, face painting and leather work.



EMF is an all-ages event. It is really difficult to get those with families of any age to go somewhere for a weekend. EMF recognizes this and runs world class facilities for children. There is a creche where children can play and explore in a soft play area (but in a tent). Mirroring the main event there is a family lounge, this year featuring giant inflatable RGB tentacles, activities for children and the adults they were looking after and places to sit and let the event roll over them.

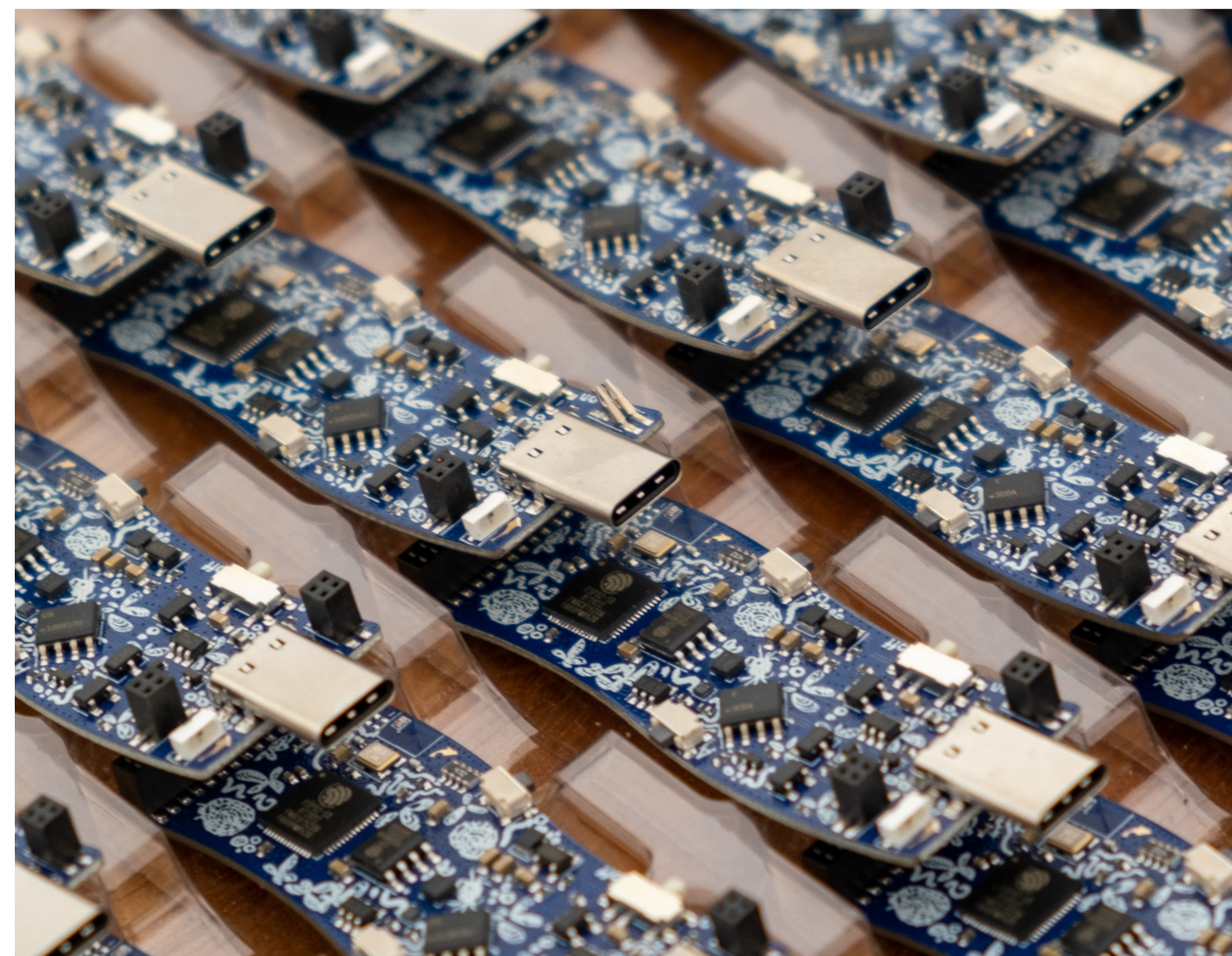


The youth workshop track ran every day of the festival until 9 in the evening and featured bridge building, teaching computers with AI, introductions to hardware hacking with the raspberry pi pico and a renowned DJing workshop.

After the youth DJ workshop, it is said that some of the children came together and planned a takeover of the night club in Null Sector and performed afternoon sets with their own freshly minted DJ names.

## Installations

EMF is an event by and for the hacker community, it is likely impossible to visit this field and not want to come back with your own LED instal-



lation to join the nighttime illuminations. Installations at EMF Camp fill the evenings with wonder and make walking around the site as the day comes to a close a requirement.

Installations come in the form of LED strips showing interesting patterns, but they also grow to become huge things. The lake this year featured a giant clock made of florescent tubes, the clock showed the time most of the event until it appeared on the network and showed "HAKD" for a few hours.

Following in the wake of the American Toorcamps 'ShadyTel' phone network, EMF this year got its own phone company cuTel and accompanying telephone network. cuTel were happy to install at any hour for a modest fee (it was free) a phone line to your tent, village, or installation. There were pole mounted phone boxes everywhere. I heard stories about a David Lynch table, lamp, and phone that moved around the camp disappearing when you looked away. cuTel offered fax service and sneaked in by the end of the event dial up service. Next time, I am sure you will be able to dial into a BBS from the comfort of your inflatable mattress.

## EMF Camp 2022

EMF is an excellent event and well worth trying to attend in the future. It was probably only due to remaining pandemic fears that tickets didn't sell out immediately as they did in 2018. It is an event made by the work of volunteers, everyone there has a ticket, including the main organizers.

There is so much to do at the event that it can almost be overwhelming. Some locations you can only see in passing and so much more of the event is revealed by looking at social media afterwards. There were entire robotic vehicles that I missed in person but saw roll by on twitter. There are things I can only mention in passing like the DECT phone network, the GSM phone network that was installed just for the event or the thousands of things that volunteers did to make the event happen.



It is hard to not leave re-energized and full of ideas for projects, talks, workshops and installations to take to the next event. It is impossible to not look at someone's inflatable LED mushroom and not want to add to the environment next time.

I highly recommend hacker festivals for all ages, equally if you want to dance until 2AM or if you want to have a relaxed weekend with young children. These events don't happen every year, EMF is on a two schedule. The German and Dutch festivals happen every four years with MCH the Dutch event also this Summer and CCCamp likely to happen in 2023.

If you can, make a special effort to join one of these events. They are worth sleeping in a field for a few days and braving the weather. In exchange, you get to war dial on a rotary phone, solve a puzzle in a biotech lab, or just sit on a deck chair by a lake and enjoy the sunset.

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