

CERN Courier Archive: 1972

A LOOK BACK TO CERN COURIER VOL. 12, SEPTEMBER 1972, COMPILED BY PEGGIE RIMMER

CERN NEWS

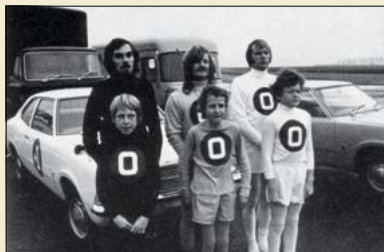
Pop physics

How to give insight into the concepts of particle physics? How to show the general public something of the inherent fascination and fundamental importance of a subject that seems so far removed from ordinary affairs and so dependent on advanced mathematics? This was the problem confronting Denis Postle of Tattooist International, the producer of a film that CERN and the British Broadcasting Corporation (BBC) have made as a co-production.

The project started nearly three years ago, after Postle had come to Geneva to make a film for the regular BBC science programme *Horizon*. This film, like others before it, talked about CERN, the machines and the physicists, but the physics remained for the most part in the background, intangible and inaccessible.

We needed a new style, a new approach, and we had to be selective in the phenomena described. It was pointless to try to cram into forty minutes of film a physics course that most students find difficult enough spread over as many months. In any case, few members of the public wish to become physicists overnight. They are interested in knowing what particle physics has to do with them, how it relates to their day-to-day affairs and what this research reveals.

In producing the film, CERN has provided the physics know-how and many people have spent a lot of time and effort in trying to explain the principal themes of present-day



Shots from the CERN/BBC TV film to be released in November: hadrons (vehicles), pions (boys) and kaons (adults) prepare for interactions. The last two carry zero hadronic charge. They are black, grey and white for negative, zero, and positive electric charge. Unfortunately, from a photograph it is not possible to hear the hypercharge! (Image credits: CERN/BBC.)

research in simple terms – none more so than R Hagedorn. The BBC, in the person of Peter Goodchild, editor of *Horizon*, has provided expertise on presentation and has been the final arbiter on audience acceptance. Postle as producer has turned the talk into a theme, pictures and text. Compounds have become bubble rafts, atoms concert halls, protons motorcars, pions small boys, interactions dances, and quarks a series of moves in a special game of chess. The accelerators, the ISR and the big detectors remain in the background, giving place to a machine gun and paper target that provided the participants at least with a lot of fun. The music has been composed and is played by Pete Townshend of The Who.

The film is meant to be entertaining



Jeremy [Newson] confronts the quark model on a special chessboard.

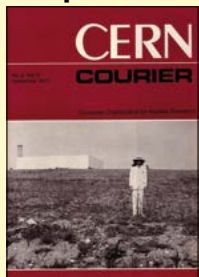
but it is, nevertheless, a serious attempt to show something of the methods behind the research, and to give some impression of the surprising order and harmony underlying the disorders and divisions usually more apparent in our daily lives.

For the BBC, it represented a new approach, both in technique and organization. For Tattooist, it was a challenge to get to grips with a subject that must be one of the most difficult to portray. For CERN, it is another experiment – if not in physics, at least in physics communication.

Comment from a physicist: “We risk making high-energy physics crystal clear to the public and totally obscure to the physicist!”

● Compiled from texts on pp 288–289.

Compiler's Note



In 2012, the first Collide@CERN artist-in-residence was German-born Julius von Bismarck, and the first Dance and Performance prizewinner was Swiss choreographer Gilles Jobin. Working together, they produced *Quantum*, an ode to particle physics for six dancers. This widely acclaimed fusion of dance and lighting premiered in the CMS cavern for CERN's Open Days in September 2013, and has since been on a world tour. It can be seen on YouTube.

But this was not CERN's first foray into fusion. Forty years earlier, CERN and the BBC co-produced the TV film *Shadows of Bliss*, which aired on 2 November 1972. The audible hypercharge was presumably Pete Townshend. A rock composer of some repute, Townshend was also known as a collider, smashing his guitar against stationary targets during performances by The Who.

Many sequences were changed or dropped as a result of trial audience reactions, and a representative of the public – young poet and actor Jeremy Newson – became a permanent part of the film. Jasia Reichardt, a highly esteemed contemporary reviewer, wrote that “the film is excellent and will give a lot of pleasure to scientists as well as those completely innocent of high-energy physics.” *Shadows of Bliss* can be seen at <https://cds.cern.ch/record/1023489>.

Among the harbingers of summer at CERN, mostly high-flying migratory physicists, is an occasional bird of paradise. One of these exotics was performance artist James Lee Byars, pictured on the *CERN Courier* cover in September 1972 and at <https://cds.cern.ch/record/2012228>. Just a glimpse of his distinctive plumage – flowing hair, panama hat, white suit and silver shoes – sometimes on the restaurant terrace, sometimes in a quiet corner of the site, and we knew that the sunny season had arrived!



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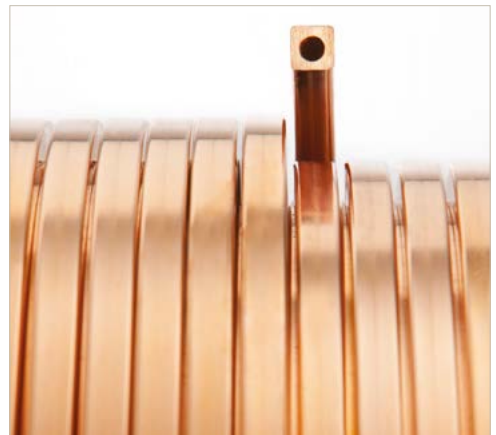
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