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On top of the world

**The ICTP has given
Trieste a new role
and helped many of
the world's scientists**

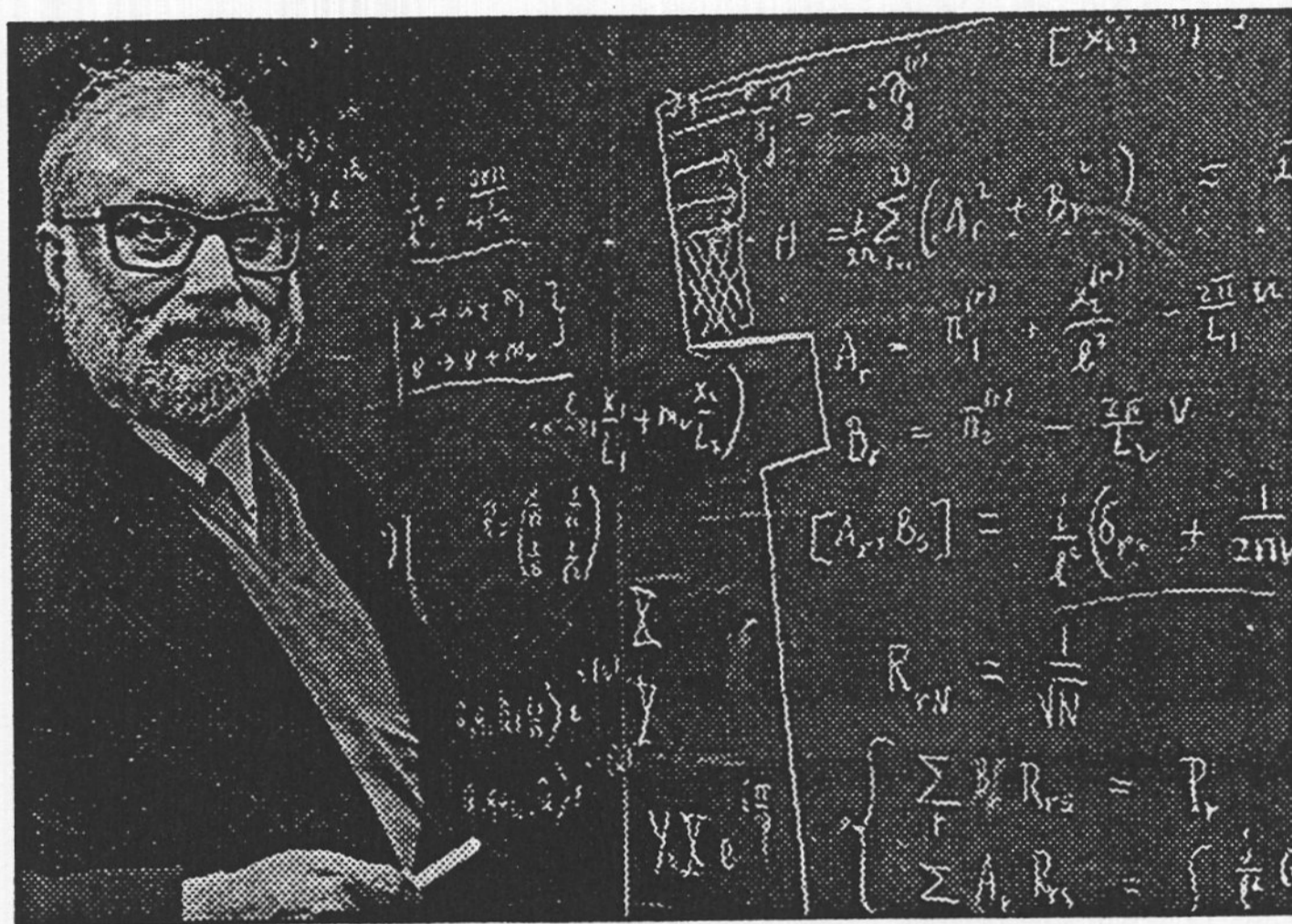
Trieste is becoming a scientific centre unique in Italy (*John Earle writes*), thanks largely to the drive and inspiration of a determined Pakistani physicist. Last month, the Italian prime minister, Giulio Andreotti, flew to Trieste, to speak at the silver anniversary celebration of the International Centre for Theoretical Physics, headed since its foundation 25 years ago by Professor Abdus Salam, now 63 and a 1979 Nobel laureate.

Since 1964, nearly 40,000 scientists have visited the ICTP to attend workshops, seminars and courses or to carry out research. About 28,000 of the scientists come from developing countries. "The Third World is slowly waking up to the realization that science and technology are what distinguish the South from the North," Salam has written. "On science and technology depend the standards of living of a nation."

Salam, who is also professor of theoretical physics at Imperial College, London, realized this himself when he returned to Pakistan with a double first from the University of Cambridge and a doctorate from the Cavendish Laboratory. He felt intellectually in a desert.

Last summer, Salam was awarded an honorary knighthood (KBE), and while in Britain he talked to Mrs Thatcher about his latest plans.

These include spawning a worldwide network of 20 research centres, concentrating on high technology and the earth's environment. He has broached the topic of this network to a dozen heads of government, mostly from



Worldly wise: Professor Abdus Salam is realizing a long-held ambition.

the Third World, as well as to the non-aligned summit in Belgrade in September.

For several years the professor has urged the extension of the work of the Trieste physics centre to other disciplines, with the result that a full-scale international centre for science is being created. It will include three new extensions: an international centre for

'Science and technology are what distinguish the South from the North'

genetic engineering and biotechnology – already functioning on a small scale – and centres for pure and applied chemistry, high technology and material sciences, and for earth sciences.

Salam would not have got far without the Italian government's resolve to find a new role for Trieste, combined with its far-sighted approach to the Third World. Rome pays most of the ICTP's \$20 million annual budget from its overseas aid programme.

The government also contrib-

utes to the Trieste Research Area, or science park, which interlocks with Salam's initiative. An important figure there is another Nobel physics laureate, Professor Carlo Rubbia of the European Council for Nuclear Research (CERN) in Geneva and a native of Gorizia in Friuli. He heads a team working on a synchrotron, a "light machine" to produce high brilliance X-rays.

"The whole operation is unique in Italy," says Professor Domenico Romeo, a biochemist, and president of the consortium running the Area. The Area accommodates the Genetic Engineering Centre and the nascent Chemistry Centre. About 50 hectares are allocated for the synchrotron. Romeo expects the present 330 staff to increase to 500-600 in two years, and eventually to about 1,200.

The Area is to have business-orientated laboratories. For example, one company manages software for local authorities, while Officine Galileo and Trieste university astronomy department are to provide spectrometers for an Italian space satellite.