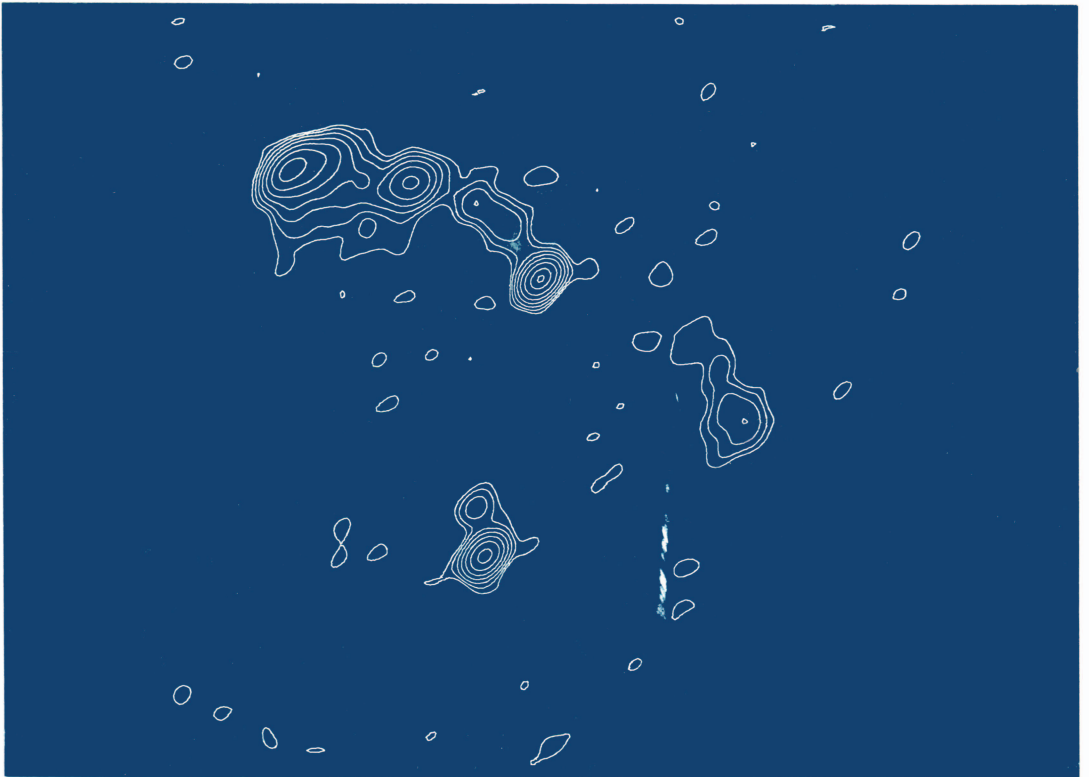


INTERNATIONAL ASTRONOMICAL UNION

SYMPOSIUM No. 92

OBJECTS OF HIGH REDSHIFT

Edited by G. O. ABELL and P. J. E. PEEBLES



INTERNATIONAL ASTRONOMICAL UNION

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Since 1977 when IAU Symposium 79 on Large-Scale Structure was held in Tallinn, a number of developments have greatly increased the body of observational data of cosmological significance.

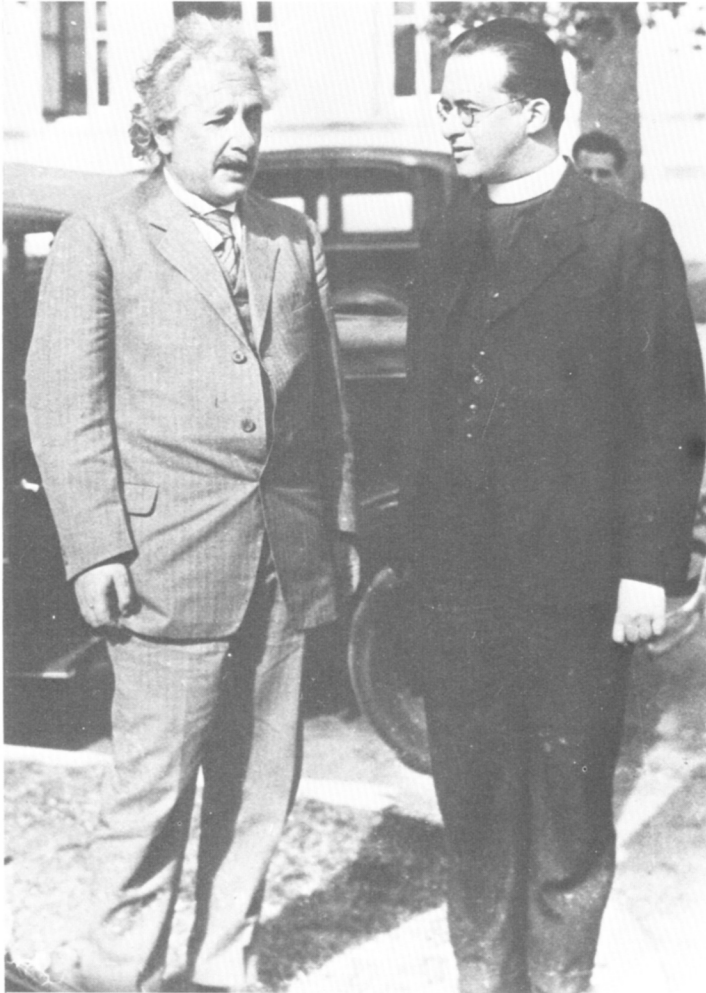
The Einstein X-ray telescope, launched in late 1978, has shown that the diffuse X-ray background is almost certainly due to quasars. Several independent investigations of the apparent magnitude distribution of faint galaxies have placed new limits on the scale of inhomogeneities in the universe, as well as on the role of galaxy evolution. Ever more remote clusters of galaxies are being discovered and redshifts measured for them have completely overwhelmed Minkowski's remarkable achievement in 1970 of observing $z = 0.46$ for 3C295. The microwave background radiation, however, has still frustrated scientists' attempts to find small-scale anisotropies, but a very exciting large-scale anisotropy indicating the global peculiar velocity of our galaxy now seems to be well established.

With so many findings and in some cases lack of findings where they were expected, it seemed highly appropriate to schedule a conference on these observations dealing with objects of cosmologically interesting redshifts. This volume, then, is the proceedings of that meeting.

(The editors thank P. E. Greenfield (MIT), B. F. Burke (MIT), and D. H. Roberts (Brandeis Univ.) for permission to use their 6 cm VLA map made in February 1980, of the double quasar 0957 + 561.)

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OBJECTS OF HIGH REDSHIFT



Lemaître and Einstein at Pasadena (1933)

ABBÉ GEORGES ÉDOUARD LEMAÎTRE (1894–1966)

"The evolution of the world can be compared to a display of fireworks that has just ended: some few red wisps, ashes and smoke. Standing on a well-chilled cinder, we see the slow fading of the suns, and we try to recall the vanished brilliance of the origin of the worlds." (From "L'expansion de l'espace" in the *Revue des Questions Scientifiques*, November, 1931.)

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OBJECTS OF HIGH REDSHIFT

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