object has been measured, we can determine the charge e provided that the quantity ER/mg is known for the object in question. To do this it is sufficient to produce a simple ionization in the object (by means of a radioactive substance, for instance) and to measure again the displacement with the same electric field inserted; the method, of course, implies that the objects have a few charges. Note that in this way we do not need to know separately the values of m , R and E ; the parameter ER/mg is determined directly. Note also that there is no need, in this method, that the object be spherical, which was necessary in Millikan experiment in order to make use of the Stokes law.

To conclude two remarks seem appropriate:

1) We hope to succeed in levitating droplets of water: this is because, if

quarks do exist, the ionic character of their binding makes it probable that they can be found in water at a concentration larger than in other materials. Note that the specific diamagnetic susceptibility of water is $0.72 \cdot 10^{-6}$ while that of bismuth is $1.35 \cdot 10^{-6}$ ⁽¹⁰⁾. Since the levitating force goes as $H \cdot \partial H / \partial z$ it is not excluded that this can be made.

2) Since in a standard object are contained $2.4 \cdot 10^{14}$ molecules (this figure refers to water) the experiment should allow (if one measures, say, 1000 objects) to prove or disprove the existence of quarks to a few parts in 10^{18} . Note, by the way, that what we have called the standard conditions are by no means critical.

⁽¹⁰⁾ *International Critical Tables*, vol. 6 (National Research Council, 1929).

Partial-Wave Amplitudes of the Baryon-Baryon Scatterings in SU_6 Symmetry.

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The assignment of the octet baryons in this paper is different from the usual one by R conjugation operation. R conjugation should be done on all the octet baryon states in the paper. Table III holds valid as it stands.