Errata

Prof. James Hanson discovered several errors in the article entitled "Cassini: His Ovals and Geocentricity" which appeared in issue No. 96. Many of these errors are due to the non-wysiwyg (what-yousee-is-what-you-get) character of Microsoft Word's Times New Roman Symbols font. These corrections are:

Pg. 38 line 13. Change "through" to "thorough."

Pg. 41 line 2. Change "sun" to "sum."

Pg. 41 line 2 from the bottom. Change "K/x" and "K/y" to "dK/dx" and "dK/dy."

Pg. 45, line 5 on down to "from which..." should read as follows:

$$K = \prod_{i} d_{i}^{2} = \prod_{i} [(x-a_{i})^{2} + (y-b_{i})^{2}]$$

= $\prod_{i} [x^{2} + y^{2} - 2(a_{i}x + b_{i}y) + a_{i}^{2} + b_{i}^{2}]$
= $(x^{2} + y^{2})^{n} \prod_{i} [1 - 2(a_{i}x + b_{i}y)/(x^{2} + y^{2}) + (a_{i}^{2} + b_{i}^{2})/(x^{2} + y^{2})]$

For large *K* the points (a_i, b_i) appear as a cluster each of which is about distance *d* from (x, y), i.e., $d_i \approx d$ and $K = d_1^2 d_2^2 \dots d_n^2 \approx d^{2n}$. Then neglecting small terms: $d_i \approx d$

$$K \approx d^{2n} \approx (x^2 + y^2)^n (1 - 2\sum_i r_i r \cos ?_i/d^2)$$
$$K^{1/n} \approx (x^2 + y^2)(1 - 2\sum_i r_i r \cos ?_i/d^2)^{1/n} \approx (x^2 + y^2)(1 - (2/n)\sum_i r_i r \cos ?_i/d^2)$$

A renewed interest in Le Sage

Long-time readers of the *Biblical Astronomer* and *the Bulletin of the Tychonian Society* before that will recall the significance of Le Sage's theory of gravity. Whereas the modern theory of action-at-adistance has no physical cause for gravity, Le Sage's model does. Action-at-a-distance is a mystical thing where a pull between two bodies is transmitted through a vacuum with no "elastic" or anything like that to transmit the pull. Using the rolling ball on a rubber membrane model,¹ modern physics concludes that gravity is a curvature of space. But what causes the curvature. In the case of the rubber membrane, it is the earth's gravity that deforms the sheet by the ball's weight, but what deforms space by a body's mass? Is it gravity? If so, then gravity cannot be caused by the curvature of space, because the curvature would be caused by gravity. This kind of circular definition is metaphysical, a kind of magic which is invalid and unsound. To be blunt, it is sheer sophistry. It sounds good but it's shot full of holes.

Le Sage's model, on the other hand, does have a physical basis. In it, the universe is filled with *ultramundane corpuscles* (also called *corpuscules*) and when a body, such as the earth, is near us, then it absorbs some of the corpuscules. When that happens, we encounter more corpuscules from above the earth than from below, so the flux pushes us toward the earth, and we call that gravity.

Over the last three decades, Prof. Jim Hanson has developed the mathematics describing Le Sagean gravity, and he has been so successful with it that he can account for all the anomalies typically observed in experiments measuring the strength of gravity. These anomalies have led to a renewed interest in Le Sage's model.

With that in mind, our lead two articles talk about the effect that such shielding would have on the moon's orbit about the earth, and how it affects eclipses. The first paper is a translation of a 1912 German paper, never before presented in English. The second is a summary of a set of papers on that topic, all presented in the first decades of the twentieth century.

Did ICR present evidence for geocentricity?

In December's issue of *Impact*, the Institute for Creation Research printed an article that noted the special position the earth has in the solar system. When we examined the article, we found some sleight of hand performed to make the earth's place special. When the sleight of hand is removed, the article did *not* provide evidence for a special position of the earth in the solar system, but we did find something else special. Read the article to see what that is.

¹ For a treatment of that model, see Hanson, J. N., 1996. "Gravitational Analog of A Rolling Ball on an Elastic Membrane," *ABA Technical Paper No. 1.*