Erratum: X-Ray Study of the Outer Region of Abell 2142 with Suzaku

Hiroki AKAMATSU,1 Akio HOSHINO,2 Yoshitaka ISHISAKI,1 Takaya OHASHI,1 Kosuke SATO,3 Yoh TAKEI,4 and Naomi OTA5

1 SRON Netherlands Institute for Space Research, Sorbonnelaan 2, 3584, CA Utrecht, The Netherlands
H.Akamatsu@sron.nl
2 Graduate School of Natural Science and Technology, Kanazawa University, Kakuma, Kanazawa, Ishikawa 920-1192
3 Department of Physics, Tokyo University of Science, 1-3 Kagurazaka, Shinjuku-ku, Tokyo 162-8601
4 Department of High Energy Astrophysics, Institute of Space and Astronautical Science, Japan Aerospace Exploration Agency,
3-1-1 Yoshinodai, Chuo-ku, Sagamihara 252-5210
5 Nara Women’s University, Kitauoyanishi-machi, Nara, Nara 630-8506

(Received 2011 June 1; accepted 2011 June 20)

In the paper [PASJ 63, S1019 (2012)], there was an error in the estimation of gas mass. The correct gas mass at the virial radius is $2.40 \pm 0.20 \times 10^{14} M_\odot$. Thus, the gas mass fraction also changes from $14.4^{+7.1}_{-4.1}\%$ to $21.8^{+10.7}_{-6.3}\%$. Although this value is still consistent with the weak-lensing result of $\sim 18\%$ (Okabe & Umetsu 2008, PASJ, 60, 345), our result allows possibilities for the low electron temperature compared with that of ions, gas clumpiness in the cluster outskirts as reported in the Perseus cluster (Simionescu et al. 2011, Science, 331, 1576) and non-thermal pressure such as turbulence and bulk motions in ICM (Kawaharada et al. 2010, ApJ, 714, 423). The conclusions in the paper are not affected by this change.