APPENDIX A: MOCK GALAXY TEST RESULTS

Figure A1 to Figure A10 show the MCMC fitting results for MG2 to MG11. Discussion of these results can be found in Sec. 4.3.
Figure A1. MCMC fitting results for mock galaxy MG2. Top panel: corner plots showing the parameter correlations (density contours), their marginalised probability distributions (histograms on the top of density plots), and best-fit values. Best-fit values are defined as the median of the posterior distributions, and their uncertainties are taken as half the difference between the 84th and 16th percentiles of the distribution. Blue vertical and horizontal lines show the true values for these parameters. Bottom panel: position–velocity (pv) slices from the data (black contours) and from best-fit model (red contours). The white area represents internal mask. Top panels are pv slices along the major axis with offsets $-0.3, -0.1', 0', 0.1', 0.3'$. Bottom panels are pv slices along the minor axis with offsets $-0.3, -0.1', 0', 0.1', 0.3'$. 

\begin{align*}
    R_p &= 1.24^{+0.02}_{-0.04} \\
    h &= 1.52^{+0.21}_{-0.23} \\
    dv/dz &= -27.35^{+13.13}_{-10.30} \\
    v_z &= 21.45^{+5.73}_{-4.28} \\
    v_R &= 22.52^{+11.50}_{-9.39} \\
    \sigma &= 46.12^{+4.40}_{-4.61}
\end{align*}
Figure A2. MCMC fitting results for mock galaxy MG3. For details, see the description of Fig. A1.
Figure A3. MCMC fitting results for mock galaxy MG4. For details, see the description of Figure A1.
Figure A4. MCMC fitting results for mock galaxy MG5. For details, see the description of Fig. A1.
Figure A5. MCMC fitting results for mock galaxy MG6. For details, see the description of Fig. A1.
Figure A6. MCMC fitting results for mock galaxy MG7. For details, see the description of Fig. A1.
Figure A7. MCMC fitting results for mock galaxy MG8. For details, see the description of Fig. A1.
Figure A8. MCMC fitting results for mock galaxy MG9. For details, see the description of Fig. A1.
Figure A9. MCMC fitting results for mock galaxy MG10. For details, see the description of Fig. A1.
Figure A10. MCMC fitting results for mock galaxy MG11. For details, see the description of Fig. A1.