$$\begin{tikzcd}
A \arrow[r, "\phi"] \arrow[d, "\theta_f"'] & B \arrow[d, "\theta_g"] \\
A_f \arrow[r, "\varphi_f"] & B_g
\end{tikzcd}$$

$$\begin{tikzcd}
RingF[Fix[RingF]] \arrow[r, "map(m)"] \arrow[d, bend right, "fix"'] & RingF[Int] \arrow[d, "evalToInt"] \\
Fix[RingF] \arrow[r, "m"] \arrow[u, bend right, "unfix"'] & Int
\end{tikzcd}$$

$$\begin{tikzcd}
F[Fix[F]] \arrow[r, "map(m)"] \arrow[d, bend right, "unfix"'] & F[A] \\
Fix[F] \arrow[r, "m"] \arrow[u, bend right, "fix"'] & A \arrow[u, "coeval"']
\end{tikzcd}$$

$$\begin{tikzcd}
A \arrow[r, "ana"] \arrow[rr, bend right, "cataana"'] & Fix[RingF] \arrow[r, "cata"] & B
\end{tikzcd}$$

$$Fix[RingF] \Longrightarrow (Elem \longrightarrow Z) \longrightarrow ((Z,Z) \xrightarrow{add} Z) \longrightarrow ((Z,Z) \xrightarrow{mult} Z) \Longrightarrow Z$$

$$Fix[RingF] \Longrightarrow (Either[Elem,(Z,Z),(Z,Z)] \longrightarrow Z) \Longrightarrow Z$$

$$Fix[RingF] \Longrightarrow (RingF[Z] \xrightarrow{alg} Z) \Longrightarrow Z$$

$$\begin{tikzcd}
Fix[RingF] \arrow[r, Rightarrow] \arrow[rr, bend right, "cata"'] & (RingF[Z] \xrightarrow{alg} Z) \arrow[r, Rightarrow] & Z
\end{tikzcd}$$

$$\begin{tikzcd}
F[A] \arrow[r, "map(f)"] & F[B] \\
A \arrow[u, dashed, "F"] \arrow[r, "f"'] \arrow[ur, dashed, "map"] & B \arrow[u, dashed, "F"']
\end{tikzcd}$$

$$\begin{tikzcd}
RingF[RingF[Int]] \arrow[r, "map(evalToInt)"] \arrow[d, dashed, "RingF"'] \arrow[rr, bend left, "evalToInt \circ map(evalToInt)"] & RingF[Int] \arrow[r, "evalToInt"] \arrow[d, dashed, "RingF"] & Int \\
RingF[Int] \arrow[r, "evalToInt"'] \arrow[ur, dashed, "map"'] & Int &
\end{tikzcd}$$